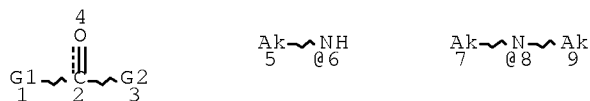


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L1 1 SEA FILE=HCAPLUS ABB=ON PLU=ON US20050095314/PN
 L7 STR



VAR G1=NH2/6
 VAR G2=NH2/6/8
 NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 5
 CONNECT IS E1 RC AT 7
 CONNECT IS E1 RC AT 9
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L12 SCR 2043 OR 1918 OR 1995 OR 2016 OR 2021 OR 2026
 L14 SCR 1838
 L16 2207 SEA FILE=REGISTRY SSS FUL L7 NOT (L12 OR L14)
 L18 95805 SEA FILE=HCAPLUS ABB=ON PLU=ON L16
 L22 653 SEA FILE=HCAPLUS ABB=ON PLU=ON L18(L)FFD/RL
 L23 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L22(L)FISH?
 L24 41 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND FISH?
 L25 39 SEA FILE=HCAPLUS ABB=ON PLU=ON L18(L)(FEED? OR DIET? OR
 FOOD?)(3A)(FISH? OR (MARINE? OR AQUATIC OR OCEAN?)(2A)
 SPECIES OR CRUSTACEAN?)
 L26 75 SEA FILE=HCAPLUS ABB=ON PLU=ON (L23 OR L24 OR L25)
 L27 49 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND FFD/RL
 L28 1 SEA FILE=REGISTRY ABB=ON PLU=ON 57-13-6/RN
 L29 2206 SEA FILE=REGISTRY ABB=ON PLU=ON L16 NOT L28
 L33 8406 SEA FILE=HCAPLUS ABB=ON PLU=ON L29
 L34 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L33 AND (FEED? OR DIET?
 OR FOOD?)(3A)(FISH? OR (MARINE? OR AQUATIC OR OCEAN?)(2A)
 SPECIES OR CRUSTACEAN?)
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 L36 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 AND FISH?
 L37 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 AND L1
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 OR FOOD?)
 L39 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND (WATER? SEA? OR
 RIVER? OR LAKE? OR OCEAN? OR MARINE? OR AQUATIC?)
 L40 104865 SEA FILE=HCAPLUS ABB=ON PLU=ON FEED+PFT,NT/CT
 L41 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 AND L40
 L42 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L33 AND ANIMAL FEED?
 L43 58 SEA FILE=HCAPLUS ABB=ON PLU=ON L27 OR L34 OR L36 OR L37
 OR L39 OR L41 OR L42
 L44 36 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 AND (1840-2002)/PRY,AY
 ,PY

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L44 ANSWER 1 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1150425 HCAPLUS Full-text

DOCUMENT NUMBER: 143:405077

TITLE: Method for production of fish
waste-containing mixed feed by wet granulation
process

INVENTOR(S): Mukatova, M. D.; Kirichko, N. A.

PATENT ASSIGNEE(S): Mukatova Marfuga Dyusembaevna, Russia

SOURCE: Russ., 4 pp.
CODEN: RUXXE7

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

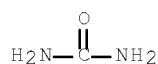
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2262862	C2	20051027	RU 2002-121866	20020807
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PRIORITY APPLN. INFO.:			RU 2002-121866	20020807
			<--	

ED Entered STN: 27 Oct 2005

AB The method involves grinding and cooking fish wastes, pressing while
introducing 2-3% urea, mixing, performing indirect steam cooking,
centrifuging, mixing with dried plant components, providing thermal
processing, cooling, introducing beer yeast, granulating and drying. The
disclosed process reduces heat and power consumption and consumption of crude
materials per unit of ready product.IT 57-13-6, Urea, biological studies
(method for production of fish waste-containing mixed
feed by wet granulation process)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



IC ICM A23K001-10

ICS A23K001-20

CC 17-12 (Food and Feed Chemistry)

ST feed manuf wet granulation fish waste plant urea yeast

IT Oryza sativa
(flour and meal; method for production of fish waste-containing
mixed feed by wet granulation process)IT Wastes
(food-processing, fish; method for production of fish
waste-containing mixed feed by wet granulation process)IT Brewers' yeast
Centrifugation
Embryophyta
Feed
Food processing
Plants
Vegetable

Wheat bran
 (method for production of fish waste-containing mixed feed by wet granulation process)

IT Fats and Glyceridic oils, biological studies
 Mineral elements, biological studies
 (method for production of fish waste-containing mixed feed by wet granulation process)

IT Crustacea
 Fish
 (processing wastes; method for production of fish waste-containing mixed feed by wet granulation process)

IT Flours and Meals
 (rice; method for production of fish waste-containing mixed feed by wet granulation process)

IT Cooking
 (steaming; method for production of fish waste-containing mixed feed by wet granulation process)

IT Algae
 Milling (size reduction)
 (wastes; method for production of fish waste-containing mixed feed by wet granulation process)

IT Granulation
 (wet; method for production of fish waste-containing mixed feed by wet granulation process)

IT 57-13-6, Urea, biological studies 1318-00-9, Vermiculite
 (method for production of fish waste-containing mixed feed by wet granulation process)

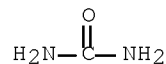
L44 ANSWER 2 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:441413 HCAPLUS Full-text
 DOCUMENT NUMBER: 143:6757
 TITLE: Environmental-protection aquatic product
 fodder adhesive and production process thereof
 INVENTOR(S): Zhang, Yanfeng; Li, Shoujun
 PATENT ASSIGNEE(S): Peop. Rep. China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, No
 pp. given
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 1507791	A	20040630	CN 2002-135877	20021213
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PRIORITY APPLN. INFO.:			CN 2002-135877	20021213
			<--	

ED Entered STN: 25 May 2005

AB The present invention relates to an environment-protecting aquatic feed adhesive, its raw material includes urea, formaldehyde and soybean powder. By mass concentration said invention uses 37% of formaldehyde solution, the weight mixing ratio of formaldehyde and urea is 1:1.2-1.75, and the added quantity of soybean powder is 10-20% of total weight of dihydroxymethyl urea glue formed by means of polycondensation reaction of urea and formaldehyde, and the viscosity of dihydroxymethyl urea glue is 100-400s. Said invented aquatic feed has no formaldehyde pollution after it is put into water, and can ensure the required time for retaining said feed in water, said feed can be swollen, but can not be dispersed.

IT 25155-29-7, Bis(hydroxymethyl) urea
 (environmental-protection aquatic product fodder adhesive
 and production process thereof)
 RN 25155-29-7 HCAPLUS
 CN Urea, bis(hydroxymethyl)- (CA INDEX NAME)



2 [D1-CH₂-OH]

IC ICM A23K001-18
 CC 17-12 (Food and Feed Chemistry)
 ST aquaculture feed adhesive urea formaldehyde soybean powder
 IT Adhesives
 Aquaculture
 Feed
 Soybean meal
 Viscosity
 (environmental-protection aquatic product fodder adhesive
 and production process thereof)
 IT 50-00-0, Formaldehyde, biological studies 57-13-6, Urea, biological
 studies 25155-29-7, Bis(hydroxymethyl) urea
 (environmental-protection aquatic product fodder adhesive
 and production process thereof)

L44 ANSWER 3 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2004:948021 HCAPLUS Full-text
 DOCUMENT NUMBER: 142:217988
 TITLE: Method for producing purified fish oil
 INVENTOR(S): Lee, Ju Yeon; Lee, Sang Hak
 PATENT ASSIGNEE(S): Dongwoo Industrial Co., Ltd., S. Korea
 SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
 CODEN: KRXXA7
 DOCUMENT TYPE: Patent
 LANGUAGE: Korean
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

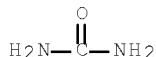
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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KR 2002051903	A	20020629	KR 2002-25073	20020507
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PRIORITY APPLN. INFO.:			KR 2002-25073	20020507
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ED Entered STN: 09 Nov 2004

AB A method for producing purified fish oil is provided to completely remove fish
 smell and store it for a long time. The method comprises the steps of: mixing
 water and MSG byproducts with fish oil; heating the mixture in a stirrer with
 agitation; adding urea into the mixture and fermenting it; steaming the
 fermented mixture at high temperature and centrifuging it to sep. the fish oil
 from the water and phospholipid; measuring the acidity of the separated fish
 oil and neutralizing it with NaOH; washing the fish oil with hot water and

drying it under vacuum; adding 150 to 200 mesh earthworm excretion powder into the dried fish oil; heat-adsorbing the fish oil to the earthworm excretion powder in a stirrer; reacting them at 30° or more for 30 min to 1 h; adding acidic white clay into the fish oil to adsorb pigments and filtering the fish oil; and removing the odor of the fish oil using the water vapor under vacuum, followed by cooling the fish oil, and filtering it.

IT 57-13-6, Urea, biological studies
 (fish odor removal in production of purified fish oil)
 RN 57-13-6 HCAPLUS
 CN Urea (CA INDEX NAME)



IC ICM A23L001-39
 CC 17-9 (Food and Feed Chemistry)
 ST fish oil phospholipid odor monosodium glutamate urea
 IT Earthworm
 (excretion of; fish odor removal in production of purified fish oil)
 IT Acidity
 Odor and Odorous substances
 Pigments, biological
 (fish odor removal in production of purified fish oil)
 IT Phospholipids, biological studies
 (fish odor removal in production of purified fish oil)
 IT Kaolin, uses
 (fish odor removal in production of purified fish oil)
 IT Fats and Glyceridic oils, biological studies
 (fish; fish odor removal in production of purified fish oil)
 IT Excretions
 (from earthworm; fish odor removal in production of purified fish oil)
 IT 57-13-6, Urea, biological studies 142-47-2, MSG
 (fish odor removal in production of purified fish oil)

L44 ANSWER 4 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2004:450469 HCAPLUS Full-text
 DOCUMENT NUMBER: 141:6176
 TITLE: Silicic acid, silica gels or silicates coated with wax, oil or fats for use in foods and animal feeds
 INVENTOR(S): Heindl, Frank; Drexel, Claus-peter; Aul, Christina
 PATENT ASSIGNEE(S): Degussa Ag, Germany
 SOURCE: Ger. Offen., 5 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

10/507,143

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10253193	A1	20040603	DE 2002-10253193	20021115
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PRIORITY APPLN. INFO.:			DE 2002-10253193	20021115
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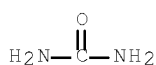
ED Entered STN: 04 Jun 2004

AB The invention concerns the coating of silicic acids, silicagels or silicates with approved edible waxes, oils or fats for use as food or animal feed additives.

IT 57-13-6, Urea, biological studies
(silicic acid, silica gels or silicates coated with wax, oil or fats for use in foods and animal feeds)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



IC ICM C01B033-12
ICS C01B033-20

CC 17-6 (Food and Feed Chemistry)

IT Fish
(feed; silicic acid, silica gels or silicates coated with wax, oil or fats for use in foods and animal feeds)

IT Feed
(fish; silicic acid, silica gels or silicates coated with wax, oil or fats for use in foods and animal feeds)

IT 50-70-4, E 420, biological studies 50-81-7, E 300, biological studies 56-86-0, E 620, biological studies 57-13-6, Urea, biological studies 57-50-1, Sucrose, biological studies 59-02-9, E 307 63-68-3, L-Methionine, biological studies 69-65-8, E 421 77-92-9, E 330, biological studies 85-32-5, E 626 87-69-4, E 334, biological studies 89-65-6, E 315 118-71-8, E 636 121-79-9, E 310 126-13-6, E 444 134-03-2, E 301 137-66-6, Ascorbyl palmitate 142-47-2, E 621 458-37-7, E 100 544-17-2, E 328 915-67-3, E 123 994-36-5, E 331 1034-01-1, E 311 1260-17-9, E 120 1338-39-2, E 493 1338-41-6, E 491 1338-43-8, E 494 1343-98-2, Silicic acid 1393-63-1, E 160b 1934-21-0, E 102 2611-82-7, E 124 2783-94-0, E 110 3567-69-9, E 122 5793-94-2, E 482 5905-52-2, E 585 7558-63-6, E 624 7647-14-5, Sodium chloride, biological studies 7664-38-2, E 338, biological studies 7758-98-7, Copper sulfate, biological studies 7778-49-6, E 332 7782-63-0, Iron sulfate heptahydrate 8000-51-9, E 160a 8004-92-0, E 104 9000-01-5, E 414 9000-07-1, E 407 9000-30-0, E 412 9000-36-6, E 416 9000-40-2, E 410 9000-65-1, E 413 9002-18-0, E 406 9004-32-4, E 466 9004-59-5, E 465 9004-64-2, E 463 9004-65-3, E 464 9004-67-5, E 461 9005-25-8, Starch, biological studies 9005-36-1, E 402 9005-38-3, E 401 9005-64-5, E 432 11138-66-2, E 415 16423-68-0, E 127 17977-66-1, E 483 18543-68-5, E 625 19473-49-5, E 622 21275-71-8, E 351 25383-99-7, E 481 26266-57-9, E 495 26658-19-5, E 492 29894-35-7, E 476 39300-88-4, E 417 62524-63-4, E 623 71010-52-1, E 418 114355-28-1, E 160c 283596-77-0, E 471 439687-68-0, E 473 503590-90-7, E 475 503591-10-4, E 477 697248-17-2, E 474 697248-18-3, E 479b 697248-25-2, E 906 697248-27-4, E 912 697248-38-7, E 914

10/507,143

697248-43-4, E 915 697248-49-0, E 160 (carotinoid) 697248-54-7, E 440b

(silicic acid, silica gels or silicates coated with wax, oil or fats for use in foods and animal feeds)

L44 ANSWER 5 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:220125 HCAPLUS Full-text

DOCUMENT NUMBER: 140:252766

TITLE: Solid feed for big fish

INVENTOR(S): Yoshitomi, Bunji; Obama, Minako; Ueda, Takashi; Konoo, Shigeki

PATENT ASSIGNEE(S): Nippon Suisan Kaisha, Ltd., Japan

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004021800	A1	20040318	WO 2003-JP11155	20030901
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JP 2004097064	A	20040402	JP 2002-262084	20020906
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JP 3979591	B2	20070919		
AU 2003261870	A1	20040329	AU 2003-261870	20030901
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EP 1566106	A1	20050824	EP 2003-794162	20030901
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MX 2005PA02328	A	20050818	MX 2005-PA2328	20050228
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			WO 2003-JP11155	W 20030901

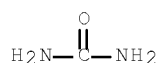
ED Entered STN: 19 Mar 2004

AB The solid feed is prepared from solid material which is prepared by extrusion by mixing with heat-labile components using heat-melting binders such as starch. The solid feed is useful for aquaculture of big fish such as tuna fish.

IT 57-13-6, Urea, biological studies
(solid feed for big fish)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



IC ICM A23K001-18

ICS A23K001-20

CC 17-12 (Food and Feed Chemistry)
 ST fish feed binder extrusion aquaculture mariculture
 IT Fish
 (big; solid feed for big fish)
 IT Drug delivery systems
 (capsules; solid feed for big fish)
 IT Sausage casings
 (edible; solid feed for big fish)
 IT Aquaculture
 (mariculture; solid feed for big fish)
 IT Alcohols, biological studies
 (polyhydric; solid feed for big fish)
 IT Extrusion, nonbiological
 Extrusion apparatus
 Feed
 Grains (particles)
 Oncorhynchus mykiss
 Plasticizers
 Tablets
 Thermal stability
 Thunnus
 (solid feed for big fish)
 IT Carbohydrates, biological studies
 (solid feed for big fish)
 IT 57-13-6, Urea, biological studies 9005-25-8, Starch,
 biological studies
 (solid feed for big fish)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L44 ANSWER 6 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2003:737497 HCAPLUS Full-text
 DOCUMENT NUMBER: 139:245088
 TITLE: Feed for aquatic species and crustaceans
 INVENTOR(S): Breivik, Harald; Kulas, Elin; Aasbo, Kari;
 Aanesen, Berit Annie; Sanna, Lola Irene
 PATENT ASSIGNEE(S): Norsk Hydro Asa, Norway
 SOURCE: PCT Int. Appl., 16 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

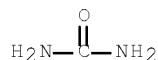
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003075677	A1	20030918	WO 2003-NO84	20030311

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 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
 LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
 NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
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 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
 NE, SN, TD, TG

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NO 323683	B1	20070625		
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AU 2003212716	A1	20030922	AU 2003-212716	20030311
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EP 1489919	A1	20041229	EP 2003-708743	20030311
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US 2005095314	A1	20050505	US 2004-507143	20040909
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			<--	
			WO 2003-NO84	W 20030311

CN Urea (CA INDEX NAME)



INVENTOR(S): Nelles, Lynn P.; Sucan, Mathias; Trivedi,

10/507,143

PATENT ASSIGNEE(S): Nayankumar B.
 SOURCE: Applied Food Biotechnology, Inc., USA
 PCT Int. Appl., 39 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003041514	A1	20030522	WO 2002-US36200	20021112
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US 2003104102	A1	20030605	US 2001-993048	20011113
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US 7329426	B2	20080212		
AU 2002343659	A1	20030526	AU 2002-343659	20021112
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BR 2002014124	A	20041013	BR 2002-14124	20021112
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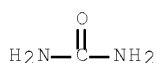
ED Entered STN: 23 May 2003

AB Oils or fats from plants and/or animals are chemical treated to create flavor/palatability enhancer (FPE) products for use with animal foods, such as dog or cat food. This method involves mixing triglycerides (from the oil or fat) with sulfur and/or nitrogen donor compds., such as sodium sulfide. The mixture is cooked at a temperature close to boiling, or higher if pressure-cooking is used, for a period of time sufficient to break down large nos. of triglyceride mols. into their constituent fatty acids and other fragments. Under suitable cooking conditions, the organic fragments will react with sulfur and/or nitrogen atoms from the donor compound(s), to form relatively small organic mols. containing sulfur and/or nitrogen.

IT 57-13-6, Urea, biological studies
 (treatment of vegetable oils or animal fats with sulfur or nitrogen donor compds. for animal food flavorings)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



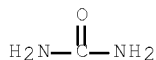
IC ICM A23L001-22

CC 17-12 (Food and Feed Chemistry)

10/507,143

IT Fats and Glyceridic oils, biological studies
(fish; treatment of vegetable oils or animal fats with
sulfur or nitrogen donor compds. for animal food flavorings)
IT 57-13-6, Urea, biological studies 74-79-3, L-Arginine,
biological studies 1336-21-6, Ammonium hydroxide 7704-34-9,
Sulfur, biological studies
(treatment of vegetable oils or animal fats with sulfur or nitrogen
donor compds. for animal food flavorings)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L44 ANSWER 8 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:740544 HCAPLUS Full-text
DOCUMENT NUMBER: 137:351820
TITLE: Rheological properties of heat-induced gels of
surimi from acid and alkali process
AUTHOR(S): Choi, Yeung Joon; Park, Joo Dong; Kim, Jin-Soo;
Cho, Young-Je; Park, Jae W.
CORPORATE SOURCE: Division of Marine Bioscience/Institute of Marine
Industry, Gyeongsang National University,
Tongyeong, 650-160, S. Korea
SOURCE: Han'guk Susan Hakhoechi (2002), 35(4),
309-314
CODEN: HSHKAW; ISSN: 0374-8111
PUBLISHER: Korean Fisheries Society
DOCUMENT TYPE: Journal
LANGUAGE: Korean
ED Entered STN: 30 Sep 2002
AB Rheol. properties of surimi gel from white fishes by acid (acid surimi) and
alkali (alkali surimi) processes and effect of chems. on gelation were
investigated by punch and dynamic tests. The breaking force and deformation
values were less in heat-induced acid surimi than in conventional alkali
surimi, and whiteness in acid surimi was greatly decreased. Gel point
decreased in acid surimi but increased in alkali surimi with increasing
moisture content in the range of 80 to 85%. Storage modulus was highest at pH
6.8 in acid surimi, but in alkali surimi, it showed high values at neutral and
slightly alkali pHs. Propylene glycol increased storage modulus at
20.apprx.50°, but urea and 2-mercaptoethanol suppressed it. Potassium bromide
improved storage modulus at 20.apprx.80°. The results suggest that the alkali
process can be used for making surimi instead of the conventional method.
IT 57-13-6, Urea, biological studies
(rheol. properties of heat-induced gels of surimi from acid and
alkali process)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)



CC 17-7 (Food and Feed Chemistry)
IT Fish
Food gelling
Food rheology
Merluccius productus
Pennahia argentata

Protonibea diacanthus

(rheol. properties of heat-induced gels of surimi from acid and alkali process)

IT Fish

(surimi; rheol. properties of heat-induced gels of surimi from acid and alkali process)

IT 57-13-6, Urea, biological studies 57-55-6, Propylene glycol, biological studies 60-24-2, 2-Mercaptoethanol 7758-02-3, Potassium bromide, biological studies

(rheol. properties of heat-induced gels of surimi from acid and alkali process)

L44 ANSWER 9 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:668616 HCAPLUS Full-text

DOCUMENT NUMBER: 137:337213

TITLE: Protective effect of menhaden oil on renal necrosis occurring in weanling rats fed a methyl-deficient diet

AUTHOR(S): Courreges, Maria C.; Caruso, Carla; Klein, Jochen; Monserrat, Alberto J.

CORPORATE SOURCE: Facultad de Medicina, Departamento de Patologia, Patologia Experimental, Universidad de Buenos Aires, Buenos Aires, 1114, Argent.

SOURCE: Nutrition Research (New York, NY, United States) (2002), 22(9), 1077-1089

CODEN: NTRSDC; ISSN: 0271-5317

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 05 Sep 2002

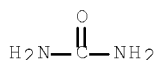
AB Weanling rats fed lipotropic-deficient diets (LDD) may develop acute renal failure with morphol. features that vary from focal tubular necrosis to widespread cortical necrosis and eventually reparative changes. The type of lipid in the diet influences the development of renal necrosis. The effects of dietary menhaden oil on the development of acute renal failure induced in weanling rats by methyl-deficient diet were examined. In Experiment I, 40 weanling Sprague-Dawley male rats were fed LDD with hydrogenated vegetable oil and corn oil as lipids (group 1), LDD with menhaden oil as lipid (group 2), and group 3 and 4 similar to groups 1 and 2 plus 0.35% choline chloride. The rats were fed ad libitum until they died; the surviving animals were killed on day 21. Mortality in the 4 groups was 60, 0, 0, and 10%, resp. Rats from groups 2, 3, and 4 did not show any renal damage. The dead rats from group 1 had tubular or cortical necrosis and those killed on the 21st day had reparative changes. Experiment II was similar to experiment I, except that 45 weanling Wistar male rats were used and were killed on the 7th day. All rats from group 1 had renal necrosis and no renal damage was found in rats from groups 2, 3, and 4. Urea and creatinine level changes corroborated the renal changes. Thus, menhaden oil has protective effects for renal necrosis induced by methyl-deficient diets in weanling rats.

IT 57-13-6, Urea, biological studies

(dietary menhaden fish oil protective effect on renal necrosis in weanling rats fed methyl-deficient diet)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)

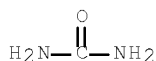


CC 18-5 (Animal Nutrition)
 Section cross-reference(s): 14
 IT 57-13-6, Urea, biological studies 60-27-5, Creatinine
 (dietary menhaden fish oil protective effect on
 renal necrosis in weanling rats fed methyl-deficient diet)
 REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L44 ANSWER 10 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2002:591669 HCAPLUS Full-text
 DOCUMENT NUMBER: 137:154384
 TITLE: Symbiotic regenerative compositions containing
 microorganisms
 INVENTOR(S): Schuer, Joerg-Peter
 PATENT ASSIGNEE(S): Germany
 SOURCE: Eur. Pat. Appl., 25 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1228769	A1	20020807	EP 2001-102384	20010202
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CA 2437530	A1	20020906	CA 2002-2437530	20020201
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WO 2002067986	A2	20020906	WO 2002-EP1056	20020201
<--				
WO 2002067986	A3	20031211		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002244694	A1	20020912	AU 2002-244694	20020201
<--				
EP 1390071	A2	20040225	EP 2002-712882	20020201
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2005503332	T	20050203	JP 2002-567351	20020201
<--				
US 2004076614	A1	20040422	US 2003-467040	20031204
<--				
PRIORITY APPLN. INFO.:			EP 2001-102384	A 20010202
<--				
			WO 2002-EP1056	W 20020201
<--				

ED Entered STN: 09 Aug 2002
 AB The invention concerns regenerative drugs, dietary supplements, feed additives that contain microorganisms and modulating substances, e.g. enzymes, GRAS (Generally Recognized As Safe) aromas, plant exts. Further the compns. contain vitamins, minerals, growth promoters, carrier substances, etc. Microorganisms are a-pathogenic, pathogenic or facultative pathogenic,.
 IT 57-13-6, Urea, biological studies
 (symbiotic regenerative compns. containing microorganisms)
 RN 57-13-6 HCAPLUS
 CN Urea (CA INDEX NAME)



IC ICM A61K045-06
 ICS A61P043-00
 CC 18-6 (Animal Nutrition)
 Section cross-reference(s): 1, 17, 63
 IT Achillea
 Actinidia chinensis
 Aesculus
 Alcaligenes faecalis
 Algae
 Allergy inhibitors
 Allium cepa
 Allium sativum
 Aloe (genus)
 Althaea officinalis
 Anethum graveolens
 Animals
 Anti-infective agents
 Antioxidants
 Antitumor agents
 Arctium
 Arnica
 Artemisia dracunculus
 Avena sativa
 Bacillus subtilis
 Beeswax
 Bifidobacterium bifidum
 Blood
 Bone
 Borrelia buccalis
 Brassica
 Calamus (palm genus)
 Camellia
 Camellia sinensis
 Cananga odorata
 Carica papaya
 Carum carvi
 Caviar
 Centaurea cyanus
 Centaurium
 Chelidonium majus
 Chrysanthemum
 Cinchona

Cinnamon (horticultural common name)
Citrobacter
Citrullus lanatus
Citrus aurantifolia
Citrus aurantium
Citrus limon
Citrus paradisi
Citrus reticulata
Citrus sinensis
Cladosporium
Cocos nucifera
Coffea
Coral
Coriandrum sativum
Corynebacterium pseudodiphtheriticum
Corynebacterium xerosis
Crataegus
Croton eluteria
Crustacea
Cucumis melo
Cucumis sativus
Cupressus
Cymbopogon
Dactylopius coccus
Daucus carota
Derris (genus)
Dietary supplements
Digestive tract
Echinacea
Egg, poultry
Elettaria cardamomum
Emulsifying agents
Equisetum
Eucalyptus
Eucalyptus citriodora
Feather
Feed additives
 Fish
Flavor
Foeniculum vulgare
Fungicides
Fur
Gaffkya tetragena
Gentiana
Geotrichum
Ginkgo
Glycine max
Glycyrrhiza
Hair
Hamamelis
Hay
Hedera
Helianthus annuus
Hibiscus
Honey
Human
Humulus
Hypericum
Immunostimulants
Immunosuppressants

Immunotherapy
Ivory
Juglans
Juniperus
Lactobacillus acidophilus
Lactobacillus casei
Lactobacillus delbrueckii bulgaricus
Lactobacillus fermentum
Lamium
Laurus nobilis
Lavandula
Lawsonia inermis
Leather
Liquidambar
Malus pumila
Malva
Mangifera indica
Marigold
Matricaria recutita
Meat
Melissa
Mentha aquatica
Mentha piperita
Menyanthes trifoliata
Milk
Moraxella catarrhalis
Moschus
Mucor
Musa
Myristica
Neisseria flava
Neisseria flavescens
Neisseria perflava
Neisseria sicca
Neisseria subflava
Nut (seed)
Odor and Odorous substances
Orange
Origanum
Origanum vulgare
Orthosiphon
Oryza sativa
Panax
Passiflora edulis
Paullinia cupana
Pearl
Persea
Peumus boldus
Phocidae
Phosphors
Picea
Pimenta dioica
Pimpinella anisum
Pinus
Placenta
Plantago major
Pollen
Porifera
Poultry
Preservatives

Primula veris
 Propolis
 Prunus amygdalus
 Prunus persica
 Quassia
 Rheum
 Rhodotorula rubra
 Rosmarinus officinalis
 Royal jelly
 Ruscus aculeatus
 Saccharomyces cerevisiae
 Salvia
 Sarcina
 Satureja
 Scorzonera hispanica
 Serratia marcescens
 Sesamum indicum
 Silk
 Simmondsia chinensis
 Solanum tuberosum
 Solvents
 Staphylococcus epidermidis
 Streptococcus
 Styrax
 Symphytum officinale
 Syzygium aromaticum
 Taraxacum officinale
 Taxus
 Theobroma cacao
 Theobroma grandiflorum
 Thymus (plant)
 Tilia
 Torulopsis
 Trifolium
 Trigonella foenum-graecum
 Tussilago farfara
 Urtica
 Valeriana
 Veillonella parvula
 Veratrum viride
 Viscaceae
 Wheat bran
 Whey
 Yeast
 Zingiber officinale

(sybiotic regenerative compns. containing microorganisms)

- IT 50-14-6, Calciferol 50-21-5, Lactic acid, biological studies
 50-81-7, L-Ascorbic acid, biological studies 52-90-4, L-Cysteine,
 biological studies 56-81-5, Glycerin, biological studies 56-87-1,
 L-Lysine, biological studies 57-11-4D, Stearic acid, derivs.
 57-13-6, Urea, biological studies 57-55-6, Propyleneglycol,
 biological studies 57-83-0, Progesterone, biological studies
 57-88-5, Cholesterol, biological studies 58-22-0, Testosterone
 59-02-9, α -Tocopherol 59-43-8, Thiamin, biological studies
 59-67-6, Nicotinic acid, biological studies 62-54-4, Calciumacetate
 64-17-5, Ethylalcohol, biological studies 64-18-6, Formic acid,
 biological studies 64-19-7, Acetic acid, biological studies
 66-25-1, Hexylaldehyde 67-63-0, Isopropanol, biological studies
 69-65-8, Mannite 70-47-3, L-Asparagine, biological studies
 71-23-8, Propylalcohol, biological studies 71-36-3, n-Butylalcohol,

biological studies 71-41-0, n-Amyl alcohol, biological studies
 75-07-0, Acetaldehyde, biological studies 76-22-2, Camphor
 77-92-9, Citric acid, biological studies 78-70-6, Linalool
 78-83-1, Iso Butylalcohol, biological studies 78-84-2 79-83-4,
 Pantothenic acid 83-79-4, Rotenone 83-88-5, Riboflavin, biological
 studies 87-44-5, β -Caryophyllen 87-66-1, Pyrogallol
 87-89-8, Inositol 89-83-8, Thymol 90-64-2, Mandelic acid
 93-15-2, Methyleugenol 93-28-7, Eugenolacetate 94-59-7, Safrol
 94-86-0, Propenylguaethol 97-53-0, Eugenol 97-54-1, Isoeugenol
 98-01-1, Furfural, biological studies 98-85-1, α -
 Methylbenzylalcohol 100-51-6, Benzylalcohol, biological studies
 100-52-7, Benzaldehyde, biological studies 100-66-3, Anisol,
 biological studies 102-16-9, Benzylphenylacetate 102-76-1,
 Triacetine 103-09-3, Octylacetate 103-45-7 103-54-8,
 Cinnamylacetate 103-82-2, Phenylacetic acid, biological studies
 104-46-1, Anethol 104-53-0, Hydrocinnamic aldehyde 104-54-1,
 Cinnamic alcohol 104-55-2, Cinnamic aldehyde 105-13-5, Anise
 alcohol 105-82-8, Acetaldehyde dipropylacetal 105-87-3,
 Geranylacetate 106-22-9, Citronellol 106-23-0, Citronellal
 106-24-1, Geraniol 108-46-3, Resorcin, biological studies
 108-73-6, Phloroglucin 108-95-2, Phenol, biological studies
 109-52-4, Valeric acid, biological studies 110-17-8, Fumaric acid,
 biological studies 110-82-7, Cyclohexane, biological studies
 111-02-4, Squalene 111-70-6, Heptylalcohol 111-71-7,
 Heptylaldehyde 111-87-5, Octylalcohol, biological studies
 112-05-0, Pelargonic acid 112-30-1, n-Decylalcohol 112-31-2,
 Decanal 112-43-6, 10-Undecen-1-ol 112-53-8, Laurylalcohol
 112-54-9, Laurylaldehyde 113-24-6, Sodium pyruvate 115-95-7,
 Linalylacetate 120-57-0, Heliotropin 121-32-4, Ethylvanillin
 121-33-5, Vanillin 122-03-2, Cuminaldehyde 122-59-8, Phenoxyacetic
 acid 122-72-5, Hydrocinnamylacetate 122-78-1, Phenylacetaldehyde
 122-87-2, Glycin 123-31-9, Hydroquinone, biological studies
 123-38-6, Propionaldehyde, biological studies 123-51-3, Iso-Amyl
 alcohol 123-86-4, n-Butylacetate 123-92-2, Iso-Amylacetate
 124-04-9, Hexanedioic acid, biological studies 124-13-0,
 Octylaldehyde 124-19-6, Nonylaldehyde 125-46-2, Usnic acid
 127-08-2, Potassium acetate 127-09-3, Sodium acetate 127-40-2,
 Lutein 137-08-6, Calciumpantothenate 137-66-6, Ascorbic palmitate
 138-86-3, Limonen 140-11-4, Benzylacetate 140-67-0, Methylchavicol
 141-78-6, Ethylacetate, biological studies 142-62-1, Capronic acid,
 biological studies 142-92-7, Hexylacetate 143-08-8, Nonylalcohol
 147-85-3, L-Proline, biological studies 148-03-8, β -Tocopherol
 149-91-7D, Gallic acid, derivs. 150-84-5, Citronellylacetate
 153-18-4, Rutin 154-23-4, Catechin 303-98-0, Coenzyme Q10
 321-30-2, Adenine sulfate 331-39-5, Caffeic acid 367-51-1, Sodium
 thioglycolate 432-70-2, α -Carotene 499-12-7, Aconitic acid
 499-75-2, Carvacrol 501-52-0, Hydrocinnamic acid 503-74-2,
 Iso-Valeric acid 507-70-0, Borneol 513-86-0, Acetoin 514-78-3,
 Canthaxanthine 515-69-5, α -Bisabolol 526-83-0, Tartaric acid
 536-60-7, Cuminylalcohol 541-15-1, L-Carnitine 621-82-9, Cinnamic
 acid, biological studies 871-22-7, Acetaldehyde dibutyl acetal
 1260-17-9, Carminic acid 1335-39-3, Hexenal 1390-65-4, Carmine
 1393-63-1, Annatto 1398-61-4, Chitin 1708-35-6 2111-75-3,
 Perillaaldehyde 2216-51-5 2568-25-4, Benzaldehyde propylene
 glycolacetal 5392-40-5, Citral 5660-60-6 6812-78-8, Rhodinol
 6915-15-7, Malic acid 7212-44-4, Nerolidol 7235-40-7,
 β -Carotene 7439-89-6, Iron, biological studies 7439-95-4,
 Magnesium, biological studies 7439-96-5, Manganese, biological
 studies 7439-98-7, Molybdenum, biological studies 7440-09-7,

Potassium, biological studies 7440-21-3, Silicon, biological studies 7440-31-5, Tin, biological studies 7440-47-3, Chromium, biological studies 7440-50-8, Copper, biological studies 7440-70-2, Calcium, biological studies 7447-41-8, Lithiumchloride, biological studies 7487-88-9, Magnesium-sulfate, biological studies 7493-57-4, Acetaldehyde phenethylpropyl acetal 7553-56-2, Iodine, biological studies 7558-79-4, Disodium hydrogen phosphate 7616-22-0, γ -Tocopherol 7631-86-9, Silica, biological studies 7647-14-5, Sodium chloride, biological studies 7758-11-4 7778-77-0, Potassium dihydrogen phosphate 7779-41-1, Decanaldimethyl acetal 7782-49-2, Selenium, biological studies 7782-50-5, Chlorine, biological studies 8000-41-7, Terpeneol 8007-35-0, Terpinylacetate 9000-69-5, Pectin 9000-92-4, Amylase 9001-33-6, Ficin 9001-62-1, Lipase 9001-73-4, Papain 9001-75-6, Pepsin 9001-92-7, Protease 9001-98-3, Chymosin 9002-07-7, Trypsin 9003-99-0, Peroxidase 9004-07-3, Chymotrypsin 9004-08-4, Cathepsin 9005-32-7, Alginic acid 9005-53-2, Lignin, biological studies 9013-05-2, Phosphatase 9013-19-8, Isomerase 9013-79-0, Esterase 9015-85-4, DNA-Ligase 9027-41-2, Hydrolase 9031-55-4, Carboxylase 9031-56-5, Ligase 9032-92-2, Glycosidase 9035-73-8, Oxidase 9035-82-9, Dehydrogenase 9037-29-0, Oxygenase 9047-61-4, Transferase 9055-04-3, Lyase 9055-15-6, Oxidoreductase 10032-05-0, Heptanaldimethyl acetal 10043-52-4, Calcium chloride, biological studies 10124-49-9, Iron sulfate 15431-40-0, Magnesium ascorbate 25917-35-5, Hexanol 26628-22-8, Sodium azide 33735-91-0, Guanine hydrochloride 36653-82-4, 1-Hexadecanol 37259-52-2, DNA-Ligase 50984-52-6, Anisaldehyde 84843-69-6, Tryptose 119129-70-3, Ananain 150977-36-9, Bromelain 159519-79-6, Brenzcatechin 183256-98-6, Farnesol 186209-48-3, Nonadienol

(symbiotic regenerative compns. containing microorganisms)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 11 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:605986 HCAPLUS Full-text

DOCUMENT NUMBER: 136:85190

TITLE: Effects of maize and citrus-pulp supplementation of urea-treated wheat straw on intake and productivity in female lambs

AUTHOR(S): Fonseca, A. J. M.; Dias-da-Silva, A. A.; Lourenco, A. L. G.

CORPORATE SOURCE: ICETA, Department of Animal Production, Universidade de Tras-os-Montes e Alto Douro, Vila Real, 5001, Port.

SOURCE: Animal Science (2001), 73(1), 123-136
CODEN: ANSCFO; ISSN: 1357-7298

PUBLISHER: British Society of Animal Science

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 22 Aug 2001

AB Two expts. with lambs given food indoors and individually penned were designed to study the effects of different levels of ground corn and citrus pulp as supplements of a diet based on urea-treated straw (5 kg urea per 100 kg straw) offered ad libitum over a period of 16 wk (experiment 1) or 10 wk (experiment 2). The voluntary intake, live-weight gain (LWG), organic matter digestibility (OMD), urinary allantoin-nitrogen (UAN) excretion and acetate clearance rate were measured. The lambs were blocked on weight and randomly assigned to the treatments described below. Ruminal outflow rate of the solid

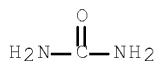
and liquid phases from the rumen were also measured in experiment 2. In experiment 1, 20 female lambs from the Ile-de-France breed, with an initial live weight (LW) of 43 (s.e. 3.3) kg were used. Wheat straw (WS) was supplemented with 50 g/kg of fish meal (FM) and with 0, 100, 200 or 300 g/kg of ground corn on a dry-matter (DM) basis (M0, M1, M2 and M3, resp.). In experiment 2, 25 female lambs from the Portuguese breed Churra-da-Terra-Quente, with an initial LW of 24.2 (s.e. 4.3) kg were used. The straw was offered ad libitum during 10 wk and supplemented with 50 g/kg of FM and 0, 100, 200, 300, or 400 g/kg of dried citrus pulp on a DM basis (CP0, CP1, CP2, CP3 and CP4, resp.). During the expts., all animals were moved to metabolism cages to measure OMD and UAN excretion. Two addnl. incubation studies were carried out with rumen fistulated rams (experiment 1) or cows (experiment 2) given the diets described above close to the maintenance feeding level. In experiment 1 daily straw DM intake linearly decreased ($P < 0.05$) from 21.6 to 17.7 g/kg LW and LWG linearly increased ($P < 0.05$) from 51 to 154 g/day for treatments M0, M1, M2 and M3, resp. The rate of straw DM degradation was significantly decreased ($P < 0.01$) by corn supplementation. Straw OMD (kg/kg) was 0.562, 0.583, 0.547 and 0.520 and UAN (mg/day) was 620, 790, 854 and 859 for treatments M0, M1, M2 and M3, resp. Acetate clearance rate, increased ($P < 0.05$) as the level of corn inclusion increased. In experiment 2 daily straw DM intake was 23.3, 25.8, 24.7, 23.5 and 18.6 g/kg LW per day and LWG was -9, 28, 44, 64 and 67 g/day for treatments CP0, CP1, CP2, CP3 and CP4, resp. Supplementation significantly increased LWG ($P < 0.001$) but at the 400 g/kg level depressed straw DM intake. Straw OMD linearly decreased ($P < 0.05$) from 0.484 (CP0) to 0.428 (CP4) g/kg and UAN (mg/day) was 181, 303, 363, 384 and 392 for treatments CP0, CP1, CP2, CP3 and CP4, resp. Rumen outflow rate of fiber particles was unaffected by supplementation while the outflow of liquid phase tended to be increased ($P < 0.10$). The rate of DM degradation was significantly reduced ($P < 0.01$) by citrus-pulp inclusion. Acetate clearance rate was unaffected ($P > 0.05$) by citrus-pulp supplementation. The results of these expts. demonstrate that supplementation of urea-treated straw with ground corn up to 200 g/kg or with citrus pulp up to 300 g/kg of the diet DM increased or did not depress straw intake, increased the supply of microbial protein and have no significant effect on straw digestibility. The efficiency of utilization of absorbed energy was apparently improved by corn but not by citrus-pulp supplementation.

IT 57-13-6, Urea, biological studies

(effects of corn and citrus-pulp supplementation of urea-treated wheat straw on intake and productivity in female lambs)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



CC 18-3 (Animal Nutrition)

IT 57-13-6, Urea, biological studies

(effects of corn and citrus-pulp supplementation of urea-treated wheat straw on intake and productivity in female lambs)

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 12 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:571378 HCAPLUS Full-text

DOCUMENT NUMBER: 135:357240

TITLE: Evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs

AUTHOR(S): Barroga, Antonio J.; Pradhan, Rajeev; Tobioka, Hisaya

CORPORATE SOURCE: Department of Animal Science, School of Agriculture, Kyushu Tokai University, Kumamoto-ken, 869-1404, Japan

SOURCE: Animal Science Journal (Tokyo, Japan) (2001), 72(3), 189-197
CODEN: ASCJFY; ISSN: 1344-3941

PUBLISHER: Japanese Society of Animal Science

DOCUMENT TYPE: Journal

LANGUAGE: English

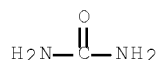
ED Entered STN: 08 Aug 2001

AB This study investigated the feed intake, and energy and nitrogen partition of growing lambs fed on diet with fish silage (FS) as a major protein supplement. The FS was compared with the conventional protein feeds like fish meal (FM) and urea (UR). Six castrated and 6 female Suffolk lambs were divided into three groups and fed on Italian ryegrass silage (IRS) as basal ration at 70% on dry matter (DM) basis. The protein based concentrate mixture of FS, FM or UR was supplemented to one of the three groups at 30% DM. The DM intake of animals was not affected by the FS diet and was comparable with the other diets. Likewise, the organic matter intake and digestible organic matter intake (DOMI) of the animals were unaffected by the varying protein supplements. The nitrogen retention of the FS group was 37% higher than that of the UR group, however, the FM group was significantly higher than the UR group ($P < 0.05$). The retained energy of the FS group with 116.6 kJ/kgW^{0.75}/d tended to decline compared to the other groups. The methane energy and methane production of the FS group, 79.1 kJ/kgW^{0.75}/d and 55.6 L/kg DOMI, resp., had a lower tendency while the heat production with 13.2 MJ/kg DOMI tended to increase compared to the other treatments. The RQ of the FS group with 1.09 tended to be lower than the other groups. These results suggest the potential of fish silage as a major protein supplement but further investigation is needed to upgrade the palatability and nutritional value.

IT 57-13-6, Urea, biological studies
(evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



CC 18-3 (Animal Nutrition)

ST fish silage protein feed lamb

IT Silage

(Italian ryegrass; evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)

IT Appetite

Energy balance

Feed energy

Feeding experiment

Sheep

Sweet potato

(evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)

IT Proteins, general, biological studies

(evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)

IT Silage

(fish; evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)

IT Fish

Lolium multiflorum

(silage; evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)

IT 7727-37-9, Nitrogen, biological studies

(evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)

IT 57-13-6, Urea, biological studies

(evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 13 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:506028 HCAPLUS Full-text

DOCUMENT NUMBER: 135:226325

TITLE: Quality evaluation of different types of non-fish meal diets for yellowtail

AUTHOR(S): Watanabe, Takeshi; Aoki, Hideo; Watanabe, Kanako; Maita, Masashi; Yamagata, Yoichi; Satoh, Shuichi

CORPORATE SOURCE: Department of Aquatic Biosciences, Tokyo University of Fisheries, Tokyo, 108-8477, Japan

SOURCE: Fisheries Science (2001), 67(3), 461-469
CODEN: FSCIEH; ISSN: 0919-9268

PUBLISHER: Japanese Society of Fisheries Science

DOCUMENT TYPE: Journal

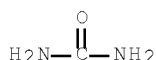
LANGUAGE: English

ED Entered STN: 13 Jul 2001

AB Two feeding expts. were conducted to evaluate the feed quality of non-fish meal diets having the same protein ingredient composition but prepared as different types, and to determine the supplemental effect of crystalline essential amino acids (EAA) on feed utilization by young yellowtail, *Seriola quinqueradiata*. Non-fish meal diets formulated with soy protein concentrate, defatted soybean meal, corn gluten meal, meat meal, and krill meal were prepared as either soft dry pellets (SDP) or extruded pellets (EP) by using a large- or a small-sized twin screw extruder under different preparation conditions; or as a single moist pellet (SMP), each with and without EAA mixts. Com. yellowtail SDP was used as the control diet. Fish weighing 134 g and 237 g on average were reared with the exptl. diets, for 93 (net cages) and 44 (aquariums) days, resp. The fish fed both the control and test diets were found to have a good appetite. Growth rate and feed gain ratio were highest in the control diet group. The physiol. condition of fish fed the control diet was evaluated as superior compared to those on the non-fish meal diets.

Among the non-fish meal diet groups, the best performances were obtained for fish fed the SDP type diet with EAA supplement, and performance parameters excelled in the order of SDP, EP and SMP in the diets with and without supplemental EAA. This suggests that the nutritional quality of non-fish meal diet was affected by the diet preparation method. It also indicates that supplementation of EAA could improve the quality of non-fish meal diets, irrespectively of the diet type, probably as a result from the enhancement of feed protein utilization.

IT 57-13-6, Urea, biological studies
 (quality evaluation of different types of non-fish meal
 diets for yellowtail)
 RN 57-13-6 HCAPLUS
 CN Urea (CA INDEX NAME)



CC 18-3 (Animal Nutrition)
 Section cross-reference(s): 12
 IT 50-99-7, D-Glucose, biological studies 57-13-6, Urea,
 biological studies 57-88-5, Cholesterol, biological studies
 60-27-5, Creatinine
 (quality evaluation of different types of non-fish meal
 diets for yellowtail)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L44 ANSWER 14 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:487085 HCAPLUS Full-text

DOCUMENT NUMBER: 135:226320

TITLE: Urea in feeds for sea water farmed Atlantic
 salmon: Effect on growth, carcass quality and
 outbreaks of winter ulcer

AUTHOR(S): Rorvik, K.-A.; Steien, S. H.; Nordrum, S.; Lein,
 R.; Thomassen, M. S.

CORPORATE SOURCE: Institute of Aquaculture Research AS, AKV AFORSK,
 As-NLH, N-1432, Norway

SOURCE: Aquaculture Nutrition (2001), 7(2),
 133-139

CODEN: AQNUF6; ISSN: 1353-5773

PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal

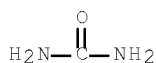
LANGUAGE: English

ED Entered STN: 06 Jul 2001

AB The effects of dietary supplementation with urea on the incidence of winter skin ulcer in sea water-farmed Atlantic salmon (*Oncorhynchus mykiss*) were studied. Salmon destined to be S0 smolt were fed urea-supplemented diet (0 or 20 g/kg feed) in fresh water for 8 wk prior to sea water transfer and were then fed diets with 0, 5, 10, or 20 g urea/kg feed during the first and second winters in the sea water. During the first winter, pos. relations between dietary urea and blood plasma urea and between plasma urea and plasma osmolality were observed. The plasma osmolality had a neg. relationship with mortality. Of the salmon that died during the first winter in the sea, 90% had one or more skin ulcers. Both during the first and second winter there were fewer salmon with ulcer among the fish fed urea. Salmon fed 20 g urea/kg

feed tended to have higher % water in muscles. The mortality and incidence of salmon with ulcers seemed to be related to blood plasma osmolality in fish fed diets that differed in urea levels, suggesting that an osmotic imbalance may contribute to the development of winter skin ulcers in farmed salmon. Salmon fed 20 g urea/kg feed had greater body weight during the second winter in sea. Fish killed without prior starvation had higher levels of muscle urea in the 20 g/kg group compared with control fish fed no urea. A 13-day starvation period decreased urea contents in the muscle to the level seen in the control fish. No effects of dietary urea supplementation on the sensory quality of market size Atlantic salmon were observed

IT 57-13-6, Urea, biological studies
 (dietary urea supplementation in sea water farmed Atlantic salmon
 effects on growth, carcass quality and occurrence of winter skin
 ulcers)
 RN 57-13-6 HCAPLUS
 CN Urea (CA INDEX NAME)



CC 18-3 (Animal Nutrition)
 Section cross-reference(s): 14, 17
 ST Oncorhynchus fish nutrition urea carcass skin ulcer blood
 osmolality
 IT 57-13-6, Urea, biological studies
 (dietary urea supplementation in sea water farmed Atlantic salmon
 effects on growth, carcass quality and occurrence of winter skin
 ulcers)

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L44 ANSWER 15 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2001:472867 HCAPLUS Full-text
 DOCUMENT NUMBER: 135:76174
 TITLE: Stabilization of pigments and polyunsaturated oils
 and oil concentrates
 INVENTOR(S): Breivik, Harald; Sanna, Lola Irene; Aanesen, Berit
 Annie
 PATENT ASSIGNEE(S): Norsk Hydro Asa, Norway
 SOURCE: PCT Int. Appl., 27 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2001046355	A1	20010628	WO 2000-NO439	20001220

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 ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
 LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,

10/507,143

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 JP 2003518161 T 20030603 JP 2001-546853 20001220
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 WO 2000-NO439 W 20001220
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OTHER SOURCE(S): MARPAT 135:76174

ED Entered STN: 29 Jun 2001

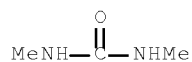
AB The method for stabilizing vegetable, marine and single cell oils or oil
 concs. as well as pigments like astaxanthin and canthaxanthin by treating the
 oil or oil concs. with ≥ 1 amines or amides R1N(R2)R3 (R1, R2, R3 = H, C1-10
 alkyl, C2-10 alkenyl, RCO-, RNHCOCO-; R = H, C1-10 alkyl, C2-10 alkenyl,
 R'NHCO-; R' = H, C1-10 alkyl, C2-10 alkenyl). The pigments and polyunsatd.
 oils and oil concs. are useful for feed, health care products and a
 composition for prophylaxis or therapeutical treatment.

IT 96-31-1, N,N'-Dimethylurea 557-11-9, Allylurea

(stabilization of pigments and polyunsatd. oils and oil concs.)

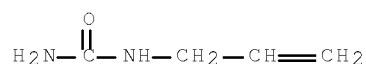
RN 96-31-1 HCAPLUS

CN Urea, N,N'-dimethyl- (CA INDEX NAME)



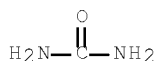
RN 557-11-9 HCAPLUS

CN Urea, N-2-propen-1-yl- (CA INDEX NAME)



IC ICM C11B005-00
 ICS A23D009-06; A23K001-16; A23K001-18; A61K031-23
 CC 17-6 (Food and Feed Chemistry)
 Section cross-reference(s): 63
 IT Fats and Glyceridic oils, biological studies
 (fish; stabilization of pigments and polyunsatd. oils and
 oil concs.)
 IT Fats and Glyceridic oils, biological studies
 (marine; stabilization of pigments and polyunsatd. oils
 and oil concs.)
 IT Fish
 (meal; stabilization of pigments and polyunsatd. oils and oil
 concs. for)
 IT Antioxidants
 Feed
 Pigments, biological
 (stabilization of pigments and polyunsatd. oils and oil concs.)
 IT 96-31-1, N,N'-Dimethylurea 111-26-2, Hexylamine 471-46-5,
 Oxamide 541-35-5, Butyramide 557-11-9, Allylurea
 7087-68-5, n-Ethyldiisopropylamine
 (stabilization of pigments and polyunsatd. oils and oil concs.)
 REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L44 ANSWER 16 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2001:460222 HCAPLUS Full-text
 DOCUMENT NUMBER: 135:303049
 TITLE: Enrichment of EPA and DHA from fish oil
 by urea inclusion-supercritical fluid extraction
 AUTHOR(S): Zhou, Yong-yi; Pan, Zhi-yan; Lin, Chun-mian
 CORPORATE SOURCE: College of Biological & Eronmental Engineering,
 Zhejiang University of Technology, Hangzhou,
 310032, Peop. Rep. China
 SOURCE: Zhejiang Gongye Daxue Xuebao (2000),
 28(4), 302-305
 CODEN: ZDXUF2; ISSN: 1006-4303
 PUBLISHER: Zhejiang Gongye Daxue Xuebao Bianjibu
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 ED Entered STN: 27 Jun 2001
 AB EPA and DHA in fish oil were enriched by urea inclusion-supercrit. fluid
 extraction with carbon dioxide. Results show that this combined method can
 enrich EPA and DHA efficiently, with the concentration of (EPA + DHA)
 increasing from 6.31% to 56.7%. The mole ratio of urea to fatty acid esters
 and the SFE temps. have important effects on the concentration of (EPA + DHA),
 while SFE pressure does not have an obvious impact on the enrichment. Optimum
 conditions were: mole ratio of urea to fatty acid ester 9:1; and SFE pressure
 and temperature 24 MPa and 45°, resp.
 IT 57-13-6, Urea, biological studies
 (enrichment of EPA and DHA from fish oil by urea
 inclusion-supercrit. fluid extraction)
 RN 57-13-6 HCAPLUS
 CN Urea (CA INDEX NAME)



CC 17-9 (Food and Feed Chemistry)
 ST fatty acid supercrit fluid extn fish oil; EPA DHA supercrit
 fluid extn fish oil; urea supercrit fluid extn fish
 oil
 IT Fats and Glyceridic oils, biological studies
 (fish; enrichment of EPA and DHA from fish oil
 by urea inclusion-supercrit. fluid extraction)
 IT Extraction
 (supercrit.; enrichment of EPA and DHA from fish oil by
 urea inclusion-supercrit. fluid extraction)
 IT 57-13-6, Urea, biological studies 124-38-9, Carbon dioxide,
 biological studies
 (enrichment of EPA and DHA from fish oil by urea
 inclusion-supercrit. fluid extraction)
 IT 6217-54-5P 10417-94-4P
 (enrichment of EPA and DHA from fish oil by urea
 inclusion-supercrit. fluid extraction)

L44 ANSWER 17 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:310610 HCAPLUS Full-text

DOCUMENT NUMBER: 136:33080

TITLE: Acute toxicity of Inipol EAP22, an oil spill
 bioremediation fertilizer, to four marine species

AUTHOR(S): Sakami, Tomoko; Takayanagi, Kazufumi; Shiraishi,
 Manabu

CORPORATE SOURCE: Natl. Res. Inst. of Aquaculture, Mie, 516-0193,
 Japan

SOURCE: Nippon Suisan Gakkaishi (2001), 67(2),
 302-303

CODEN: NSUGAF; ISSN: 0021-5392

PUBLISHER: Nippon Suisan Gakkai

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

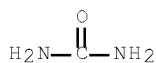
ED Entered STN: 02 May 2001

AB The toxicity of Inipol EAP22 (a nutrient) containing oleic acid tri(laureth-4)
 phosphate, 2-butoxyethanol and urea, to 4 fish, namely, Paralichthys
 olivaceus, Sillago japonica, Tigriopus japonicus, and Pinctada fucata, was
 studied. Studies indicated that use of Inipol as a nutrient supplement
 requires a careful preparation, making it sure that the level of
 administration to fish is low enough to safe-guard growing small fish.

IT 57-13-6, Urea, biological studies
 (in fish nutrient, Inipol EAP22 in relation to toxicity)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



CC 4-4 (Toxicology)
 ST toxicity Inipol fish safety

IT Safety
 (acute toxicity of Inipol EAP22, bioremediation fertilizer, to
 fish in relation to)

IT Fish
 Paralichthys olivaceus
 Pinctada fucata
 Sillago japonica
 Tigriopus japonicus
 (nutrient Inipol EAP22 to fish in relation to toxicity)

IT 57-13-6, Urea, biological studies 111-76-2, 2-Butoxyethanol
 112-80-1, Oleic acid, biological studies 31800-90-5
 (in fish nutrient, Inipol EAP22 in relation to toxicity)

L44 ANSWER 18 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:520234 HCAPLUS Full-text

DOCUMENT NUMBER: 133:207176

TITLE: Interaction of protein nutrition and laidlomycin
 on feedlot growth performance and digestive
 function in Holstein steers

AUTHOR(S): Zinn, R. A.; Alvarez, E. G.; Montano, M. F.;
 Ramirez, J. E.

CORPORATE SOURCE: Desert Research and Extension Center, University
 of California, El Centro, CA, 92243, USA

SOURCE: Journal of Animal Science (Savoy, Illinois) (
 2000), 78(7), 1768-1778

CODEN: JANSAG; ISSN: 0021-8812

PUBLISHER: American Society of Animal Science

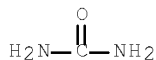
DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 01 Aug 2000

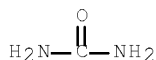
AB Two isonitrogenous diets with 12.5% crude protein (CP) containing 20 (20% NPN) or 40% (40% NPN) N as non-protein N were combined with 0 or 10 mg laidlomycin propionate (LP)/kg in feedlot Holstein steer feeding. Changes in dietary NPN/N ratio were made by partial substitution of urea N for fish meal N. In Trial 1, 4 Holstein steers (349 kg) with cannulas in the rumen and proximal duodenum were used to evaluate the treatment effects on digestive functions. The total tract organic matter (OM) digestion was slightly greater (1.2%) for diets containing 20% N as NPN due to greater (3.4%) postruminal OM digestion. LP decreased the passage of microbial N to the small intestine (7.4%) and ruminal degradation of dietary CP (DIP, 8.1%). Decreasing the NPN/N ratio decreased the microbial N flow to the small intestine (7.5%) and DIP (15%) and increased (6%) the flow of indispensable amino acids to the small intestine. LP increased ruminal pH value. There were no treatment effects on ruminal molar proportions of acetate or propionate. In Trial 2, 120 Holstein steers (122 kg) were used to evaluate the treatment effects on growth performance. Decreasing the NPN/N ratio increased the average daily gains (ADG) by 36, 40, and 16%, resp., for the initial three 56-day periods of the trial. Overall, the ADG was 17% greater in cattle fed 20 vs. 40% NPN. Decreasing the NPN/N ratio increased the feed/gain efficiency by 17 and 14%, resp., in the initial two 56-day periods. Overall, the gain efficiency was 6% greater with 20% NPN. The dietary NPN/N ratio did not influence the net energy value of the diets. LP did not affect the dry matter intake, but increased ADG (6%) and gain efficiency (5%) and decreased (11%) the maintenance energy requirements. Protein nutrition limited the growth performance of calves fed 20% NPN during the initial 112 days of the trial. With the 40% NPN diets, protein nutrition limited the growth performance throughout most of the trial (days 1 to 224). Thus, LP can enhance daily body weight gain and gain efficiency of calf-fed Holstein steers. Conventional urea-based diets do not diminish the response to LP, although they may not meet the metabolizable amino acid requirements of calf-fed Holsteins during the first 3 quarters of the feeding period.

IT 57-13-6, Urea, biological studies
 (dietary protein, urea and laidlomycin effects on feedlot growth
 performance and digestive function in Holstein steers)
 RN 57-13-6 HCAPLUS
 CN Urea (CA INDEX NAME)



CC 18-3 (Animal Nutrition)
 Section cross-reference(s): 17
 IT 57-13-6, Urea, biological studies
 (dietary protein, urea and laidlomycin effects on feedlot growth
 performance and digestive function in Holstein steers)
 REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L44 ANSWER 19 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2000:281131 HCAPLUS Full-text
 DOCUMENT NUMBER: 133:309235
 TITLE: The solubilization rates of squid meat gel in
 protein-solubilizing liquids
 AUTHOR(S): Ishikawa, Satoru
 CORPORATE SOURCE: Aomori Prefect. Res. Stn. Fish Process.,
 Hachinohe, 031-0831, Japan
 SOURCE: Aomori-ken Suisanbutsu Kako Kenkyusho Kenkyu
 Hokoku (2000), Volume Date 1998 25-28
 CODEN: ASKHEX; ISSN: 0912-1056
 PUBLISHER: Aomori-ken Suisanbutsu Kako Kenkyusho
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
 ED Entered STN: 01 May 2000
 AB Squid meat is utilized as a surimi-based product (fish meat paste). To
 investigate the mechanism of gelatinization of squid meat, the effect of urea
 on the solubilization of the gel was examined. The gel was solubilized with 5M
 urea at 40°. The solubilization ratio and the change in subunit composition
 corresponded with the change in its gel strength.
 IT 57-13-6, Urea, biological studies
 (solubilization rates of squid meat gel in protein-solubilizing
 liqs.)
 RN 57-13-6 HCAPLUS
 CN Urea (CA INDEX NAME)



CC 17-7 (Food and Feed Chemistry)
 IT Fish
 (surimi; solubilization rates of squid meat gel in
 protein-solubilizing liqs.)
 IT 57-13-6, Urea, biological studies

(solubilization rates of squid meat gel in protein-solubilizing liqs.)

L44 ANSWER 20 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2000:34701 HCAPLUS Full-text
 DOCUMENT NUMBER: 132:77839
 TITLE: Stabilisation of pigments and polyunsaturated oils
 INVENTOR(S): Breivik, Harald; Sanna, Lola Irene
 PATENT ASSIGNEE(S): Norsk Hydro Asa, Norway
 SOURCE: PCT Int. Appl., 26 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

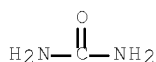
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000001249	A1	20000113	WO 1999-NO216	19990625
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RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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US 6630188	B1	20031007	US 2001-720669	20010302
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PRIORITY APPLN. INFO.:			NO 1998-3050	A 19980701
<--				
			WO 1999-NO216	W 19990625
<--				

ED Entered STN: 14 Jan 2000

AB The present invention relates to a method for stabilizing vegetable and animal oils as well as pigments like astaxanthin and canthaxanthin with regard to oxidation It also relates to a feed for salmonids, and a method for

optimizing the effect of the pigment in feed for salmonids. An essential feature of the invention is treatment by or presence of urea.

IT 57-13-6, Urea, biological studies
 (stabilization of pigments and polyunsatd. oils for salmonid feed)
 RN 57-13-6 HCAPLUS
 CN Urea (CA INDEX NAME)



IC ICM A23K001-16
 ICS A23K001-18
 CC 17-6 (Food and Feed Chemistry)
 IT Fats and Glyceridic oils, biological studies
 (fish; stabilization of pigments and polyunsatd. oils for salmonid feed)
 IT 50-81-7, Vitamin C, biological studies 57-13-6, Urea, biological studies 137-66-6, Ascorbyl palmitate
 (stabilization of pigments and polyunsatd. oils for salmonid feed)
 REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 21 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:594404 HCAPLUS Full-text

DOCUMENT NUMBER: 129:302038

TITLE: A trial to culture yellowtail with non-fishmeal diets

AUTHOR(S): Watanabe, Takeshi; Aoki, Hideo; Shimamoto, Kunikazu; Hadzuma, Masataka; Maita, Masashi; Yamagata, Yoichi; Kiron, Viswanath; Satoh, Shuichi

CORPORATE SOURCE: Laboratory of Fish Nutrition, Department of Aquatic Biosciences, Tokyo University of Fisheries, Tokyo, 108-8477, Japan

SOURCE: Fisheries Science (1998), 64(4), 505-512

CODEN: FSCIEH; ISSN: 0919-9268

PUBLISHER: Japanese Society of Fisheries Science

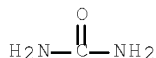
DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 18 Sep 1998

AB The use of non-fish meal diets for rearing *Seriola quinqueradiata* yellowtail fish was studied. The exptl. diets were formulated with soy protein concentrate, defatted soybean meal, corn gluten meal, and meat meal as protein sources. Juvenile (average 13 g) and young (average 130 g) yellowtail fish were fed the exptl. diets for 52 and 75 days, resp., and their body growth and feed performance parameters were compared with the fish fed the fish meal control diet. The exptl. diets were of poor palatability to the juvenile fish as reflected by their inferior feed performance and growth compared to controls. Young fish fed the exptl. diets showed active feeding and normal body growth for the first 46 days of feeding, but thereafter their growth stagnated and poor feed/gain ratio and high mortality were observed irresp. of the dietary treatments. At the end of the expts., both juvenile and young fish fed the exptl. diets had the green liver syndrome and poor blood characteristics, indicative of the abnormal physiol. status. Thus, the non-fish meal diets were not efficient in maintaining the normal growth and health of juvenile and young yellowtail fish during the rearing period.

IT 57-13-6, Urea, biological studies
 (dietary non-fish meal diets use for
 rearing yellowtail fish)
 RN 57-13-6 HCAPLUS
 CN Urea (CA INDEX NAME)

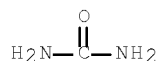


CC 18-3 (Animal Nutrition)
 IT 50-99-7, D-Glucose, biological studies 56-87-1, L-Lysine, biological
 studies 57-13-6, Urea, biological studies 57-88-5,
 Cholesterol, biological studies 60-27-5, Creatinine 63-68-3,
 L-Methionine, biological studies 72-19-5, L-Threonine, biological
 studies 9001-78-9
 (dietary non-fish meal diets use for
 rearing yellowtail fish)
 REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L44 ANSWER 22 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1998:567054 HCAPLUS Full-text
 DOCUMENT NUMBER: 129:275222
 TITLE: Effects of fish meal and sodium bentonite on daily
 gain, wool growth, carcass characteristics, and
 ruminal and blood characteristics of lambs fed
 concentrate diets
 AUTHOR(S): Walz, L. S.; White, T. W.; Fernandez, J. M.;
 Gentry, L. R.; Blouin, D. C.; Froetschel, M. A.;
 Brown, T. F.; Lupton, C. J.; Chapa, A. M.
 CORPORATE SOURCE: Agricultural Center, Louisiana State University,
 Baton Rouge, LA, 70803, USA
 SOURCE: Journal of Animal Science (1998), 76(8),
 2025-2031
 CODEN: JANSAG; ISSN: 0021-8812
 PUBLISHER: American Society of Animal Science
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 07 Sep 1998
 AB The effects of replacing some soybean meal (SBM) protein with fish meal (FM)
 protein in diets adequate and slightly deficient in crude protein (CP, in dry
 matter) and effects of 0.75% sodium bentonite (NaB) additive on the production
 performance and ruminal and blood metabolites were studied in individually fed
 Suffolk lambs. The diets contained corn, SBM, and cottonseed hulls. In
 Experiment 1, 15 lambs were fed diets with 11% CP + 3% FM and 13% CP + 0 or 3%
 FM. Lambs fed 11% CP + 3% FM or 13% CP + 0% FM had similar dry matter intake
 (DMI) and average daily gains (ADG). The gain and feed efficiency were
 slightly improved by the 13% CP + 3% FM diet. In Experiment 2, 32 lambs were
 fed 4 diets with 13.5% CP in dry matter in a 2 + 2 factorial arrangement with
 0 or 3% FM and 0 or 0.75% NaB on as-fed basis. The DMI and ADG were increased
 by FM and NaB supplementation. Interactions revealed that NaB increased DMI,
 ADG, gain per feed (g/kg DMI), and blood plasma urea N concns. in the absence
 of FM, but not in the presence of FM in the diet. Neither FM nor NaB
 influenced the wool growth. The concns. of total ruminal volatile fatty acids
 were increased by FM and NaB. Differences in the mineral content of the

phalanx bone, liver, and kidney were small and may have been related to the mineral content of diets and effects of NaB on mineral solubilities. The similar DMI and ADG of lambs fed FM and NaB sep. and in combination suggest that their beneficial effect is not additive.

IT 57-13-6, Urea, biological studies
 (dietary fish meal and sodium bentonite effects
 on daily gains, wool growth, carcass composition, and ruminal and blood
 indexes in sheep lambs)
 RN 57-13-6 HCAPLUS
 CN Urea (CA INDEX NAME)



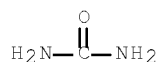
CC 18-3 (Animal Nutrition)
 IT 57-13-6, Urea, biological studies 7439-89-6, Iron,
 biological studies 7439-95-4, Magnesium, biological studies
 7439-96-5, Manganese, biological studies 7440-09-7, Potassium,
 biological studies 7440-50-8, Copper, biological studies
 7440-66-6, Zinc, biological studies 7440-70-2, Calcium, biological
 studies
 (dietary fish meal and sodium bentonite effects
 on daily gains, wool growth, carcass composition, and ruminal and blood
 indexes in sheep lambs)

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L44 ANSWER 23 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1998:371341 HCAPLUS Full-text
 DOCUMENT NUMBER: 128:320919
 TITLE: Method for conservation of granular fish
 caviar
 INVENTOR(S): Peganov, Eduard M.
 PATENT ASSIGNEE(S): Rodionov, Oleg Valentinovich, Russia; Nikolaeva,
 Irina Sergeevna
 SOURCE: Russ. From: Izobreteniya 1997, (35), 355.
 CODEN: RUXXE7
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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RU 2098975	C1	19971220	RU 1996-119490	19960927
			<--	
PRIORITY APPLN. INFO.:			RU 1996-119490	19960927
			<--	

ED Entered STN: 17 Jun 1998
 AB Title only translated.
 IT 57-13-6, Carbamide, biological studies
 (method for preservation of granular fish caviar)
 RN 57-13-6 HCAPLUS
 CN Urea (CA INDEX NAME)



IC ICM A23B004-14
 CC 17-7 (Food and Feed Chemistry)
 IT Caviar
 (method for preservation of granular fish caviar)
 IT 57-13-6, Carbamide, biological studies 7647-14-5, Sodium
 chloride, biological studies
 (method for preservation of granular fish caviar)

L44 ANSWER 24 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1998:268442 HCAPLUS Full-text
 DOCUMENT NUMBER: 128:326258
 TITLE: Biochemical media system for reducing pollution
 INVENTOR(S): Reddy, Malireddy S.; Reddy, Syama M.
 PATENT ASSIGNEE(S): Reddy, Malireddy S., USA; Reddy, Syama M.
 SOURCE: PCT Int. Appl., 55 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9817592	A1	19980430	WO 1997-US18737	19971021
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W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5876990	A	19990302	US 1996-731886	19961022
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AU 9749857	A	19980515	AU 1997-49857	19971021
<--				
EP 946427	A1	19991006	EP 1997-912750	19971021
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EP 946427	B1	20040721		
R: DE, DK, FR, GB, IE				
TW 570975	B	20040111	TW 1997-86115579	19971022
<--				
PRIORITY APPLN. INFO.:			US 1996-731886	A 19961022
<--				
			WO 1997-US18737	W 19971021
<--				

ED Entered STN: 11 May 1998

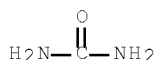
AB A first media provides an oxygen inducer such as catalase, bound and stabilized in pellet form to dissipate slowly into aqueous surroundings. A second media provides an oxygen supplier such as a peroxide, stabilized by combination with a proteinaceous compound such as urea and bound in a matrix

that limits oxygen release. The two media are combined in aqueous environment to generate nascent oxygen at a modulated rate such that the oxygen is efficiently absorbed into the surrounding aqueous environment, promoting growth of aerobic species and reducing biol. pollution. Specific adaptations demonstrate benefits of use in shrimp of fish ponds, raw milk, fruit juice, fresh food, silage and animal feed, fertilizer, plumbing systems, and grease traps. When used in ponds, further adaptations reduce algae and phytoplankton populations.

IT 124-43-6
 (biochem. media system for adding oxygen, promoting biol. activity,
 and reducing pollution)
 RN 124-43-6 HCAPLUS
 CN Urea, compd. with hydrogen peroxide (H2O2) (1:1) (CA INDEX NAME)
 CM 1
 CRN 7722-84-1
 CMF H2 O2

HO—OH

CM 2
 CRN 57-13-6
 CMF C H4 N2 O



IC ICM C02F001-72
 ICS C02F003-34
 CC 61-5 (Water)
 Section cross-reference(s): 5, 16, 17, 19, 60
 IT 50-81-7, L-Ascorbic acid, biological studies 57-13-6, Urea,
 biological studies 63-42-3 124-43-6 137-40-6 144-55-8,
 Carbonic acid monosodium salt, biological studies 302-04-5,
 Thiocyanate, biological studies 471-34-1, Carbonic acid calcium salt
 (1:1), biological studies 1313-60-6, Sodium peroxide (Na2(O2))
 1335-26-8, Magnesium peroxide 2650-18-2 7429-90-5, Aluminum,
 biological studies 7429-90-5D, Aluminum, salts 7439-95-4,
 Magnesium, biological studies 7439-95-4D, Magnesium, compds.
 7440-70-2, Calcium, biological studies 7440-70-2D, Calcium, compds.
 7631-86-9, Silica, biological studies 7681-38-1 7722-84-1,
 Hydrogen peroxide (H2O2), biological studies 7758-98-7, Sulfuric
 acid copper(2+) salt (1:1), biological studies 9000-30-0, Guar gum
 9000-92-4, Amylase 9001-05-2, Catalase 9001-37-0 9001-62-1
 9001-92-7, Proteinase 9003-99-0, Peroxidase 9005-32-7, Alginic
 acid 9005-53-2, Lignin, biological studies 9012-54-8, Cellulase
 9028-79-9 9031-11-2 9032-75-1, Polygalacturonase 15630-89-4
 (biochem. media system for adding oxygen, promoting biol. activity,
 and reducing pollution)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L44 ANSWER 25 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:776009 HCAPLUS Full-text
DOCUMENT NUMBER: 128:34070
TITLE: Animal feed manufacturing method based on
fish oil
INVENTOR(S): Park, Soo Kil; Lee, Sang Hak
PATENT ASSIGNEE(S): S. Korea
SOURCE: U.S., 3 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 5693358	A	19971202	US 1995-545873	19951020
			<--	
PRIORITY APPLN. INFO.:			US 1995-545873	19951020
			<--	

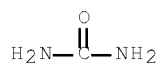
ED Entered STN: 12 Dec 1997

AB Disclosed is an animal feed manufacturing method in which powdered fish oil of a main raw material is obtained by processing fishes containing a large amount of docosahexaenoic acid and eicosapentaenoic acid. The animal feed manufacturing method includes the steps of adding urea to fish oil together with a monosodium glutamate byproduct and fermenting the fish oil, sep. removing water and phospholipid contained in the fermented fish oil, adding quicklime to the separated fish oil and cooling the quicklime-added fish oil via gumming and salting-out processes, and thereby obtaining powdered animal feed using a cooling roller or presser.

IT 57-13-6, Urea, biological studies
(processing method for animal feed containing fish oil)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



IC ICM A23K001-10

ICS A23D007-04; C11B003-00

INCL 426643000

CC 17-12 (Food and Feed Chemistry)

ST fish oil glutamate urea feed

IT Fats and Glyceridic oils, biological studies
(fish; processing method for animal feed containing fish oil)

IT Feed
Heat

(processing method for animal feed containing fish oil)

IT Lime (chemical)

(processing method for animal feed containing fish oil)

IT Phospholipids, processes
 (processing method for animal feed containing fish oil)

IT 6217-54-5, Docosahexaenoic acid 10417-94-4, Eicosapentaenoic acid
 (processing method for animal feed containing fish oil)

IT 57-13-6, Urea, biological studies 142-47-2, Monosodium
 glutamate
 (processing method for animal feed containing fish
 oil)

L44 ANSWER 26 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:738696 HCAPLUS Full-text

DOCUMENT NUMBER: 128:33974

TITLE: Separation of ω3 polyunsaturated fatty acids
 from fish oil and stabilization of the
 oil against autoxidation

AUTHOR(S): Han, Daeseok; Shin, Hyun-Kyung; Yoon, Suk Hoo

CORPORATE SOURCE: Korea Food Research Institute, Kyunggido, 463-420,
 S. Korea

SOURCE: ACS Symposium Series (1997), 674(Flavor
 and Lipid Chemistry of Seafoods), 255-263
 CODEN: ACSMC8; ISSN: 0097-6156

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

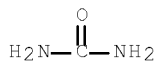
ED Entered STN: 24 Nov 1997

AB Fatty acid fractions rich in eicosapentaenoic acid (EPA) and docosahexaenoic
 acid (DHA) could be obtained from sardine oil by solvent fractional
 crystallization and urea adduct formation methods. The former method was
 based on the solubility difference of saturated and unsatd. fatty acid salts
 in ethanol. Since the composition of EPA and DHA changed due to the kind of
 organic solvent used as the reaction medium for urea adduct formation, EPA and
 DHA could selectively be enriched. Ascorbic acid could be solubilized in fish
 oil via fish oil/lecithin/water reverse micelles. When 200 ppm ascorbic acid
 was used together with 4,000ppm δ-tocopherol, the induction period of the
 stabilized fish oil was extended 22 times as compared to that of a control
 sample. Combined use of tocopherol and ascorbic acid could inhibit the
 production of carbonyl and volatile compds., and the oxidative polymerization
 of the polyunsatd. fatty acids.

IT 57-13-6, Urea, biological studies
 (adduct formation with; separation of ω3 polyunsatd. fatty acids
 from fish oil and stabilization of oil against autoxidn.)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



CC 17-9 (Food and Feed Chemistry)

ST fish oil omega3 fatty acid purifn

IT Fats and Glyceridic oils, processes
 (sardine; separation of ω3 polyunsatd. fatty acids from
 fish oil and stabilization of oil against autoxidn.)

IT Autoxidation
 (separation of ω3 polyunsatd. fatty acids from fish oil
 and stabilization of oil against autoxidn.)

IT 57-13-6, Urea, biological studies
 (adduct formation with; separation of ω 3 polyunsatd. fatty acids
 from fish oil and stabilization of oil against autoxidn.)

IT 64-17-5, Ethanol, biological studies
 (fractional crystallization with; separation of ω 3 polyunsatd. fatty acids
 from fish oil and stabilization of oil against autoxidn.)

IT 50-81-7, Ascorbic acid, biological studies 119-13-1,
 δ -Tocopherol
 (separation of ω 3 polyunsatd. fatty acids from fish oil
 and stabilization of oil against autoxidn.)

IT 6217-54-5P 24880-45-3P
 (separation of ω 3 polyunsatd. fatty acids from fish oil
 and stabilization of oil against autoxidn.)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L44 ANSWER 27 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:326079 HCAPLUS Full-text

DOCUMENT NUMBER: 127:49609

TITLE: Effect of moisture content and different levels of
 additives on chemical composition and in vitro dry
 matter digestibility of rice straw

AUTHOR(S): Pradhan, Rajeev; Tobioka, Hisaya; Tasaki, Iwao

CORPORATE SOURCE: School of Agriculture, Kyushu Tokai University,
 Kumamoto, 869-14, Japan

SOURCE: Animal Science and Technology (1997),
 68(3), 273-284

CODEN: ALSTEQ; ISSN: 0918-2365

PUBLISHER: Japanese Society of Zootechnical Science

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 22 May 1997

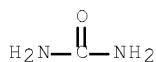
AB The effects of additives and a combination of alkaline or enzyme treatment
 with that of a nitrogenous compound on improvement for the utilization of rice
 straw by ruminants were determined. In experiment 1, rice straw of ca 500 g
 dry matter (DM) each was treated with sodium hydroxide (NaOH), calcium
 hydroxide (Ca(OH)₂), urea, ammonia, NaOH+urea, Ca(OH)₂ + urea, and
 cellulolytic enzymes such as clampzyme and cellulase with or without urea
 adjusting the DM level to 65% or 80% and the effect on the chemical
 composition and the in vitro dry matter digestibility (IVDMD) of rice straw
 was observed. The pH of the straw increased with NaOH, Ca(OH)₂ and urea
 treatments. The treatment of straw with urea alone or in combination with
 other chems. prevented the mold growth except for Ca(OH)₂+urea at 80% DM
 level. The treatment of straw with urea or ammonia increased the crude
 protein (CP) content. Ammonia formation from urea was partly inhibited by the
 addition of NaOH or Ca(OH)₂. The crude ash content was increased by NaOH or
 Ca(OH)₂ treatment. The treatments lowered the neutral detergent fiber (NDF),
 which was generally lower at 65% DM level than at 80%. At 65% DM level, NaOH
 and Ca(OH)₂ treatments remarkably improved IVDMD depending on the
 concentration of the additives. Urea and ammonia treatment also improved
 IVDMD, but the extent was not so great. The addition of urea to alkalis
 showed slight increase on IVDMD. In general, the IVDMD of the treated straws
 was higher at 65% DM level than at 80%. The improvement achieved by ammonia
 treatment in experiment 1 was very low. Therefore, experiment 2 was conducted
 to verify the effect of ammonia on the IVDMD value of rice straw. In
 experiment 2, rice straw of 5 kg DM each was treated with either 6 kg urea or
 3 kg ammonia per 100 kg straw DM and the DM level was adjusted to 65%, 72.5%
 or 80%. Ammonia treatment tended to lower the NFD and hemicellulose content.

The IVDMD was higher by ammonia treatment than by urea treatment ($P < 0.05$). The difference in the extent of improvement by ammonia treatment between the experiment 1 and 2 might be due to the different treatment methods. From these results, the treatment with NaOH 2%+urea 4% at both DM levels and Ca(OH)₂ 4%+urea 4% at 65% DM level seems to be more favorable for higher CP content, prevention of mold growth and improved IVDMD.

IT 191171-97-8 191171-98-9
 (effect of moisture content and different levels of additives on
 chemical composition and in vitro dry matter digestibility of rice straw)
 RN 191171-97-8 HCAPLUS
 CN Cellulase, mixt. with urea (9CI) (CA INDEX NAME)
 CM 1
 CRN 9012-54-8
 CMF Unspecified
 CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

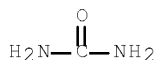
CM 2
 CRN 57-13-6
 CMF C H4 N2 O



RN 191171-98-9 HCAPLUS
 CN Urea, mixt. with clampzyme (9CI) (CA INDEX NAME)
 CM 1
 CRN 150103-94-9
 CMF Unspecified
 CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2
 CRN 57-13-6
 CMF C H4 N2 O



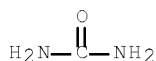
CC 17-11 (Food and Feed Chemistry)
 IT Straw
 (rice; effect of moisture content and different levels of additives
 on chemical composition and in vitro dry matter digestibility of rice
 straw)

IT 57-13-6, Urea, biological studies 1305-62-0, Calcium hydroxide
 (Ca(OH)2), biological studies 1310-73-2, Sodium hydroxide,
 biological studies 7664-41-7, Ammonia, biological studies
 9012-54-8, Cellulase 142011-85-6 150103-94-9, Clampzyme
 153109-80-9 191171-97-8 191171-98-9 191171-99-0
 (effect of moisture content and different levels of additives on
 chemical composition and in vitro dry matter digestibility of rice straw)
 REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L44 ANSWER 28 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1997:145093 HCAPLUS Full-text
 DOCUMENT NUMBER: 126:143496
 TITLE: Composition of mycoprotein bait for fishes
 and shrimps and its method of preparation
 INVENTOR(S): Lin, Lushan; Peng, Shiyao
 PATENT ASSIGNEE(S): Sandeli Mycoprotein Technology development Co.,
 Peop. Rep. China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 12
 pp.
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 1096640	A	19941228	CN 1993-107555	19930625
			<--	
PRIORITY APPLN. INFO.:			CN 1993-107555	19930625
			<--	

ED Entered STN: 06 Mar 1997
 AB The composition and process of preparation of a mycoprotein bait for fishes
 and shrimps are disclosed. This mycoprotein bait contains marine algae
 industrial residue(50-60%), thallus power(8-15%), nitrogen compound(15-30%),
 yeast(2-10%) and small amount of enzyme activator and nutritions. Mycoprotein
 bait is easy to make, inexpensive, and highly effective.
 IT 57-13-6, Urea, biological studies
 (composition of mycoprotein bait for fishes and shrimps and
 its method of preparation)
 RN 57-13-6 HCAPLUS
 CN Urea (CA INDEX NAME)



IC ICM A23K001-18
 CC 17-12 (Food and Feed Chemistry)
 ST mycoprotein fish shrimp bait; marine algae industrial
 residue fish bait
 IT Agaricus bisporus
 Bean (Phaseolus vulgaris)
 Fish
 Flammulina velutipes

Laminaria japonica
 Lentinula edodes
 Marine algae
 Porphyra haitanensis
 Shrimp
 Smilax
 Yeast

(composition of mycoprotein bait for fishes and shrimps and
 its method of preparation)

IT Amino acids, biological studies

Carbohydrates, biological studies

Trace elements, biological studies

(composition of mycoprotein bait for fishes and shrimps and
 its method of preparation)

IT Proteins, general, biological studies

(dietary; composition of mycoprotein bait for fishes and
 shrimps and its method of preparation)

IT Fish

(meal; composition of mycoprotein bait for fishes and shrimps
 and its method of preparation)

IT 57-13-6, Urea, biological studies 471-34-1, Calcium

carbonate, biological studies 7487-88-9, Magnesium sulfate,

biological studies 7727-37-9, Nitrogen, biological studies

7778-18-9, Calcium sulfate 7778-53-2, Potassium phosphate

7783-28-0 9005-65-6, Tween 80 16690-92-9, Disodium Glutamate

(composition of mycoprotein bait for fishes and shrimps and
 its method of preparation)

L44 ANSWER 29 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:256780 HCAPLUS Full-text

DOCUMENT NUMBER: 124:287720

TITLE: Sodium carbonate pulping liquor as a binder for
 animal feed

INVENTOR(S): Major, William

PATENT ASSIGNEE(S): Can.

SOURCE: Can. Pat. Appl., 11 pp.

CODEN: CPXXEB

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

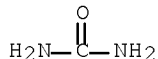
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CA 2167363	A1	19960216	CA 1996-2167363	19960116
			<--	
CA 2167363	C	19990907		
PRIORITY APPLN. INFO.:			CA 1996-2167363	19960116
			<--	

ED Entered STN: 02 May 1996

AB Sodium carbonate pulping liquor (SCPL), in liquid or powder form, can be used as a pellet binder in animal feed. SCPL is produced by cooking wood chips in steam at a pressure of 1100 KPA in the presence of a milk solution of Na₂CO₃ (115 g/L) for about 14 min. The wood chips are then compressed to sep. the spent SCPL from the wood chips, and the spent liquor is further evaporated to produce a soln of 45% solids or a dry solid. Animal feed is prepared by adding at least about 0.3-1% of SCPL (by weight of feed) to the hopper of a pellet mill prewarmed to 150°F; when feed pellets are prepared using SCPL in liquid form, the 45% solid liquid is injected directly into the conditioning chamber of the pellet mill (at ≥1 to 2% SCPL by weight of feed). Its use

provides a durable, abrasion-resistant pellet that can withstand rough handling without crumbling. Various additives can be added to the SCPL, including catalysts which will increase the rate of reaction or gel time of the SCPL, or any compds. which cause the liquor to polymerize or become more viscous.

IT 21478-49-9, Urea, ammonium salt
 (catalyst; sodium carbonate pulping liquor as a binder for animal feed)
 RN 21478-49-9 HCAPLUS
 CN Urea, ammonium salt (9CI) (CA INDEX NAME)



●x NH3

IC ICM A23K001-00
 CC 17-12 (Food and Feed Chemistry)
 IT Catalysts and Catalysis
 Polymerization catalysts
 Thickening agents
 (additive; sodium carbonate pulping liquor as a binder for animal feed)
 IT Molasses
 (polymerization agent or viscosifier; sodium carbonate pulping liquor as a binder for animal feed)
 IT Binding materials
 Feed
 (sodium carbonate pulping liquor as a binder for animal feed)
 IT Pulping liquors, biological studies
 (sodium carbonate-based, spent; sodium carbonate pulping liquor as a binder for animal feed)
 IT Bentonite, biological studies
 (calcian, polymerization agent or viscosifier; sodium carbonate pulping liquor as a binder for animal feed)
 IT Syrups
 (hydrolyzed starch, polymerization agent or viscosifier; sodium carbonate pulping liquor as a binder for animal feed)
 IT Bentonite, biological studies
 (sodian, polymerization agent or viscosifier; sodium carbonate pulping liquor as a binder for animal feed)
 IT 77-92-9, Citric acid, biological studies 1305-62-0, Hydrated lime, biological studies 1305-79-9, Calcium dioxide 1310-73-2, Sodium hydroxide, biological studies 1344-09-8, Sodium silicate 7664-38-2, Phosphoric acid, biological studies 7664-93-9, Sulfuric acid, biological studies 7697-37-2, Nitric acid, biological studies 7786-30-3, Magnesium chloride, biological studies 9011-05-6 10043-52-4, Calcium chloride, biological studies 10103-46-5, Calcium phosphate 21478-49-9, Urea, ammonium salt
 (catalyst; sodium carbonate pulping liquor as a binder for animal feed)
 IT 96-33-3, Methyl acrylate 471-34-1, Calcium carbonate, biological studies 9002-89-5, Polyvinyl alcohol 9003-05-8, Polyacrylamide 9005-25-8, Corn starch, biological studies 10086-45-0, Calcium

pyrophosphate 21056-98-4, Calcium phosphite (CaHPO₃)
(polymerization agent or viscosifier; sodium carbonate pulping liquor as a
binder for animal feed)

L44 ANSWER 30 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:774640 HCAPLUS Full-text

DOCUMENT NUMBER: 123:168257

TITLE: Separation of lipophilic compounds by complexing
with urea.

INVENTOR(S): Fex, Tomas; Olsson, Gunnar

PATENT ASSIGNEE(S): Trikonex AB, Swed.

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

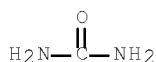
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9511216	A1	19950427	WO 1994-SE982	19941019
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RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2174426	A1	19950427	CA 1994-2174426	19941019
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AU 9480085	A	19950508	AU 1994-80085	19941019
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AU 670723	B2	19960725		
EP 724557	A1	19960807	EP 1994-931255	19941019
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EP 724557	B1	19980819		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
CN 1135747	A	19961113	CN 1994-194240	19941019
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CN 1051296	B	20000412		
JP 09504020	T	19970422	JP 1994-511695	19941019
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AT 169897	T	19980915	AT 1994-931255	19941019
<--				
US 5734071	A	19980331	US 1996-628703	19960416
<--				
NO 9601507	A	19960422	NO 1996-1507	19960417
<--				
PRIORITY APPLN. INFO.:			SE 1993-3446	A 19931020
<--				
			WO 1994-SE982	W 19941019
<--				

ED Entered STN: 06 Sep 1995

AB The invention relates to an urea fractionation process for purification of
e.g. fatty acids and derivs. thereof. Urea complexation takes place under
heterogeneous conditions, using a solvent or solvent mixture wherein the fatty
acids (or derivs.) are only slightly soluble, thus forming a two-phase system.
This allows for continued regeneration of urea and simple procedures for
product isolation. The process allows, i.a., for separation of

eicosapentaenoic acid and docosahexenoic acid from fish oil fatty acids Et esters.

IT 57-13-6, Urea, biological studies
(separation of lipophilic compds. by complexing with)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)



IC ICM C07C051-42
ICS C07C051-43; C07C051-47; C07C067-48; C07C067-52; C07C067-56;
C11C001-00; C11C001-02
CC 17-9 (Food and Feed Chemistry)
IT Fatty acids, biological studies
(fish-oil, Et esters, eicosapentaenoic acid and
docosahexenoic acid from)
IT 25167-62-8P, Docosahexaenoic acid
(separation from fish oil fatty acids Et esters by complexing
with urea)
IT 10417-94-4P, Eicosapentaenoic acid
(separation from fish oil fatty acids by Et esters complexing
with urea)
IT 57-13-6, Urea, biological studies
(separation of lipophilic compds. by complexing with)

L44 ANSWER 31 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1980:562443 HCAPLUS Full-text

DOCUMENT NUMBER: 93:162443

ORIGINAL REFERENCE NO.: 93:25805a,25808a

TITLE: Occurrence, formation, and precursors of N-nitroso
compounds in Japanese diet

AUTHOR(S): Kawabata, Toshiharu; Ohshima, Hiroshi; Uibu, Jaak;
Nakamura, Masamichi; Matsui, Masami; Hamano,
Miyoko

CORPORATE SOURCE: Dep. Biomed. Res. Foods, NIH, Tokyo, Japan

SOURCE: Proceedings of the International Symposium of the
Princess Takamatsu Cancer Research Fund (
1979), 9th(Nat. Occurring
Carcinog.-Mutagens Modulators Carcinog.), 195-209
CODEN: PPTCBY

DOCUMENT TYPE: Journal

LANGUAGE: English

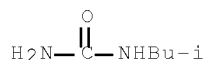
ED Entered STN: 12 May 1984

AB Data on the nitrosamine content of various fermented foods indicate that a
range from almost no detectable level to trace quantities of nitrosamines
nitrosodimethylamine [62-75-9], and nitrosopyrrolidine [930-55-2] could be
detected in various fermented sauce, vinegar, miso, sake, beer, etc. The
nitrosamine content of salt-dried fish and shellfish increased when these
products were broiled in a gas range. This was very conspicuous in the case of
dried squid, with the highest instance being 313 µg/kg. Covering dried fish
with Al foil or broiling in an elec. range was highly effective in decreasing
the degree of nitrosamine formation. No alkylureas were detected in salt-
dried fish products, including the original uncooked products and those
broiled in a gas range. Green tea exts. enhanced the nitrosation of secondary
amines Me2NH [124-40-3], Et2NH [109-89-7], pyrrolidine [123-75-1],

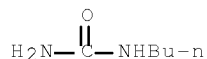
10/507,143

piperidine [110-89-4] at specific pH (3.0 or 3.4) and tea extract concentration. Among various polyphenols in green tea, only catechins catalyzed nitrosamine formation, whereas pyrocatechol [120-80-9], pyrogallol [87-66-1], and gallic acid [149-91-7] inhibited the reaction. Flavonols or flavones in tea had no effect on the nitrosation reaction.

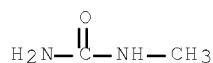
IT 592-17-6 592-31-4 598-50-5
625-52-5 627-06-5 628-49-9
691-60-1 38869-91-9
(in salt-dried fish, of Japanese diet,
nitrosamine formation and carcinogenicity in relation to)
RN 592-17-6 HCAPLUS
CN Urea, N-(2-methylpropyl)- (CA INDEX NAME)



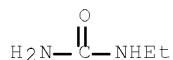
RN 592-31-4 HCAPLUS
CN Urea, N-butyl- (CA INDEX NAME)



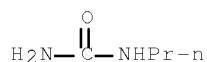
RN 598-50-5 HCAPLUS
CN Urea, N-methyl- (CA INDEX NAME)



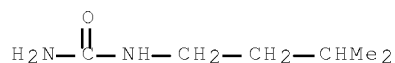
RN 625-52-5 HCAPLUS
CN Urea, N-ethyl- (CA INDEX NAME)



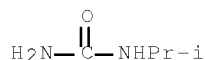
RN 627-06-5 HCAPLUS
CN Urea, N-propyl- (CA INDEX NAME)



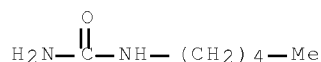
RN 628-49-9 HCAPLUS
 CN Urea, N-(3-methylbutyl)- (CA INDEX NAME)



RN 691-60-1 HCAPLUS
 CN Urea, N-(1-methylethyl)- (CA INDEX NAME)



RN 38869-91-9 HCAPLUS
 CN Urea, N-pentyl- (CA INDEX NAME)



CC 4-7 (Toxicology)
 Section cross-reference(s): 17
 IT Fish
 Shellfish
 (in Japanese diet, nitroso compds. in, carcinogenicity in relation to)
 IT 592-17-6 592-31-4 598-50-5
 625-52-5 627-06-5 628-49-9
 691-60-1 38869-91-9
 (in salt-dried fish, of Japanese diet, nitrosamine formation and carcinogenicity in relation to)

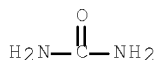
L44 ANSWER 32 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1980:469312 HCAPLUS Full-text
 DOCUMENT NUMBER: 93:69312
 ORIGINAL REFERENCE NO.: 93:11291a,11294a
 TITLE: Production of volatile fatty acids and pH values in alimentary tract of Fayoumi cock with reference to the nutritive values of the investigated rations
 AUTHOR(S): Shahta, Osman; Abdel-Rahman, M. M.
 CORPORATE SOURCE: Monoufia Univ., Cairo, Egypt
 SOURCE: Indian Journal of Animal Sciences (1980), 50(3), 256-60
 CODEN: IJLAA4; ISSN: 0367-8318
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 12 May 1984

AB The effect of feeding high- and low-fiber rations, with and without nonprotein N (NPN) and animal protein, on Fayoumi cocks was studied to estimate the nutritive values of the investigated ratios and also to determine the growth and production of total volatile fatty acids and pH values in the alimentary tract. The digestibility of nutrients in the low-fiber rations was much higher than that of high-fiber rations. Supplementation of high-fiber ration with fish meal, silkworm chrysalis, urea [57-13-6], or NH₄NO₃ increased both crude fiber and protein digestibilities and N balance. VFAs were lower in both gizzard and intestine of birds fed low-fiber rations. The highest amount of VFA was obtained in cecum followed by that in crop, as seen on low-fiber rations. The pH value was not affected by differences in the fiber protein/NPN levels of the ration but it was always lower in gizzard and crop (4.3 to 5.0) than in cecum and intestine (5.3-6.5). The N retention was the highest in low-fiber rations except for that of plant protein, which was the lowest (57.90%).

IT 57-13-6, biological studies
(feed digestibility by chickens in relation to dietary, dietary fiber effect on)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



CC 18-3 (Animal Nutrition)

IT Fish
(meal, feed digestibility by chickens in relation to dietary, dietary fiber effect on)

IT 57-13-6, biological studies 6484-52-2, biological studies
(feed digestibility by chickens in relation to dietary, dietary fiber effect on)

L44 ANSWER 33 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:88048 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 86:88048

ORIGINAL REFERENCE NO.: 86:13905a,13908a

TITLE: A note on the use of different levels of forage and sodium bentonite on the performance of calves fed high levels of molasses/urea

AUTHOR(S): Losada, H.; Santos, A.; Elias, A.

CORPORATE SOURCE: Inst. Cienc. Anim., Havana, Cuba

SOURCE: Cuban Journal of Agricultural Science (1976), 10(1), 29-33

CODEN: CJASB6; ISSN: 0864-0408

DOCUMENT TYPE: Journal

LANGUAGE: English

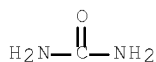
ED Entered STN: 12 May 1984

AB Calves grew faster and more efficiently when fed 4.5 kg roughage/100 kg live weight with free access to 2% urea [57-13-6] in molasses (also containing fish meal and minerals) from 14 to 180 kg live weight than feeding 1.5 kg/100 kg live weight throughout the 4-month exptl. period. Addition of up to 4% Na bentonite to the molasses stimulated addnl. growth, presumably by affecting rumen toxicity.

IT 57-13-6, biological studies
(feeding experiment with, on calves)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



CC 18-13 (Animal Nutrition)

IT 57-13-6, biological studies
(feeding experiment with, on calves)

L44 ANSWER 34 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:468291 HCAPLUS Full-text

DOCUMENT NUMBER: 85:68291

ORIGINAL REFERENCE NO.: 85:10939a,10942a

TITLE: Anticoccidial complexes of 4,4'-
dinitrocarbanilides

INVENTOR(S): Rogers, Edward F.; Dybas, Richard A.; Hannah, John

PATENT ASSIGNEE(S): Merck and Co., Inc., USA

SOURCE: U.S., 7 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

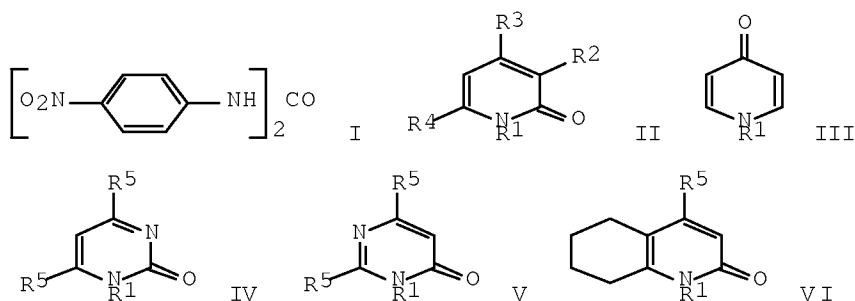
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 3957997	A	19760518	US 1974-509380	19740926
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PRIORITY APPLN. INFO.:			US 1970-316180	A2 19701218
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ED Entered STN: 12 May 1984

GI

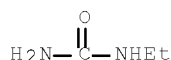


AB Compns. for the prevention and cure of coccidiosis comprise an inert carrier and 1 or more complexes of 4,4'-dinitrocarbanilide (I) with 2-pyridones (II), 4-pyridones (III), 2-pyrimidinones (IV), 4-pyrimidinones (V) or tetrahydroquinolones (VI). Thus to 41.7 g 1-methyl-3-methoxy-2(1H)pyridone (VII) [54955-13-4] in MeOH-PhMe was added 72 g I to form a thick beige solid. The slurry was stirred overnight at room temperature, filtered, washed with

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hexane and dried to give I-VII complex [59896-33-2]. Animal feed supplements were prepared containing the I complexes.

IT 625-52-5
(reaction of, with acetylacetone)
RN 625-52-5 HCAPLUS
CN Urea, N-ethyl- (CA INDEX NAME)



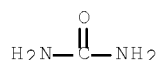
IC A61K031-44
INCL 424263000
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 27, 28
IT 625-52-5
(reaction of, with acetylacetone)

L44 ANSWER 35 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1970:465101 HCAPLUS Full-text
DOCUMENT NUMBER: 73:65101
ORIGINAL REFERENCE NO.: 73:10663a,10666a
TITLE: Research on processes for making shark meat edible
AUTHOR(S): Tishin, V. E.
CORPORATE SOURCE: USSR
SOURCE: Rybnoe Khozyaistvo (Moscow, Russian Federation) (1970), 46(1), 58-61
CODEN: RYKHAK; ISSN: 0131-6184
DOCUMENT TYPE: Journal
LANGUAGE: Russian

ED Entered STN: 12 May 1984

AB The nonprotein N content of shark meat is 1600 mg % compared to 300-400 mg % in other fish. The greatest part of this N, up to 1100 mg %, is made up by urea N. In some cases, the urea N content is up to 2300 mg %. The urea N causes a specific odor and a bitter-sour flavor in shark meat. Shark meat contains all essential amino acids. When the meat is treated with a solution of NaHCO₃ or with a 2% solution of Na₂CO₃, a good-flavored edible product is obtained. Residual urea that remains after this treatment can be treated with urease obtained from soybean flour. The quantity of urea and volatile bases was decreased 20-30 times.

IT 57-13-6, biological studies
(of shark tissue, edibility in relation to)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)



CC 17 (Foods)
ST shark meat processing food; urea shark meat food; fish shark meat urea food
IT 57-13-6, biological studies 7727-37-9, biological studies
(of shark tissue, edibility in relation to)

L44 ANSWER 36 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1953:3384 HCAPLUS
 DOCUMENT NUMBER: 47:3384
 ORIGINAL REFERENCE NO.: 47:601d-f
 TITLE: Urea derivatives as additives for animal feed
 INVENTOR(S): Harvey, Mortimer T.
 PATENT ASSIGNEE(S): Harvel Research Corp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 2592565		19520415	US 1951-213479	19510215
			<--	

ED Entered STN: 22 Apr 2001

GI For diagram(s), see printed CA Issue.

AB White crystalline reaction products of urea and Me₂CO, AcCH₂C(OH)Me₂, or mesityl oxide are added in the proportion of 1-10%, either directly or dispersed in an edible oil, to feeds for cattle, sheep, foxes, minks, skunks, and poultry. These compds. appear to act as growth stimulants.
 Triacetonediuurea, (I), Me₂C[CH₂CMe.NH.CO.NH]₂ m. approx. 252°, is prepared by bubbling dry HCl gas 56 over a period of 30 min. into urea 240 and Me₂CO 360 g. held at 40°, stirring the mixture 15 min., allowing it to stand 3-72 hrs., pouring it into an equal volume of water neutralizing with aqueous NaOH, allowing the product to crystallize, and recrystg. it from hot water.
 Diacetone monourea (II), m. 279-280°, having the structure
 Me₂C.CH₂.CMe:N.CO.NH is prepared by substituting 540 g. AcCH₂C(OH)Me₂ for the Me₂CO; crystallization from hot 1:1 EtOH-H₂O yields 350 g. A compound, m. 290-1°, apparently isomeric with II, is obtained (250 g.) by substituting 540 g. mesityl oxide for the AcCH₂C(OH)Me₂.

IT 855377-25-2, 2-Pentanone, 4-hydroxy-4-methyl-, compound with urea

(as additive for animal feed)

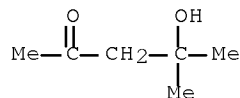
RN 855377-25-2 HCAPLUS

CN 2-Pentanone, 4-hydroxy-4-methyl-, compd. with urea (5CI) (CA INDEX NAME)

CM 1

CRN 123-42-2

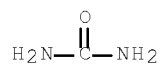
CMF C6 H12 O2



CM 2

CRN 57-13-6

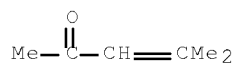
CMF C H4 N2 O



IT 856189-89-4, Mesityl oxide, compound with urea
 (for feed)
 RN 856189-89-4 HCAPLUS
 CN Mesityl oxide, compd. with urea (5CI) (CA INDEX NAME)

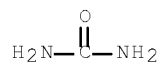
CM 1

CRN 141-79-7
 CMF C6 H10 O



CM 2

CRN 57-13-6
 CMF C H4 N2 O



CC 10 (Organic Chemistry)
 IT Acetone, compound with urea
 (as additive for animal feed)
 IT 855377-25-2, 2-Pentanone, 4-hydroxy-4-methyl-, compound with
 urea
 (as additive for animal feed)
 IT 57-13-6, Urea
 (derivs., as additives for animal feed)
 IT 856189-89-4, Mesityl oxide, compound with urea
 (for feed)

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(FILE 'HOME' ENTERED AT 09:17:40 ON 20 MAR 2008)

FILE 'HCAPLUS' ENTERED AT 09:17:49 ON 20 MAR 2008

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SEL RN

FILE 'REGISTRY' ENTERED AT 09:18:04 ON 20 MAR 2008

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L3 STR
L4 50 SEA SSS SAM L3
DIS SIA L3
L5 STR L3
L6 50 SEA SSS SAM L5
L7 STR L5
L8 2 SEA SSS SAM L7
L9 SCR 2043
L10 17 SEA SSS SAM L7 AND L9
L11 2 SEA SSS SAM L7 NOT L9
L12 SCR 2043 OR 1918 OR 1995 OR 2016 OR 2021 OR 2026
L13 2 SEA SSS SAM L7 NOT L12
L14 SCR 1838
L15 29 SEA SSS SAM L7 NOT (L12 OR L14)
L16 2207 SEA SSS FUL L7 NOT (L12 OR L14)
L17 1 SEA ABB=ON PLU=ON L16 AND L2
SAV L16 DEE143/A

FILE 'HCAPLUS' ENTERED AT 10:00:00 ON 20 MAR 2008

L18 95805 SEA ABB=ON PLU=ON L16
L19 1 SEA ABB=ON PLU=ON L1 AND L18
L20 3281 SEA ABB=ON PLU=ON L18 AND FOOD?/SC, SX
L21 196 SEA ABB=ON PLU=ON L20 AND FISH?
L22 653 SEA ABB=ON PLU=ON L18(L)FFD/RL
L23 12 SEA ABB=ON PLU=ON L22(L)FISH?
L24 41 SEA ABB=ON PLU=ON L22 AND FISH?
L25 39 SEA ABB=ON PLU=ON L18(L) (FEED? OR DIET? OR FOOD?) (3A) (FIS
H? OR (MARINE? OR AQUATIC OR OCEAN?) (2A) SPECIES OR
CRUSTACEAN?)
L26 75 SEA ABB=ON PLU=ON (L23 OR L24 OR L25)
L27 49 SEA ABB=ON PLU=ON L26 AND FFD/RL

FILE 'REGISTRY' ENTERED AT 10:11:11 ON 20 MAR 2008

L28 1 SEA ABB=ON PLU=ON 57-13-6/RN
L29 2206 SEA ABB=ON PLU=ON L16 NOT L28

FILE 'HCAPLUS' ENTERED AT 10:11:55 ON 20 MAR 2008

L30 89657 SEA ABB=ON PLU=ON L28
L31 89608 SEA ABB=ON PLU=ON L30 NOT L27
L32 0 SEA ABB=ON PLU=ON L27 NOT L30
L33 8406 SEA ABB=ON PLU=ON L29
L34 1 SEA ABB=ON PLU=ON L33 AND (FEED? OR DIET? OR FOOD?) (3A) (F
ISH? OR (MARINE? OR AQUATIC OR OCEAN?) (2A) SPECIES OR
CRUSTACEAN?)
L35 51 SEA ABB=ON PLU=ON L33 AND FFD/RL
L36 1 SEA ABB=ON PLU=ON L35 AND FISH?
L37 0 SEA ABB=ON PLU=ON L35 AND L1
L38 37 SEA ABB=ON PLU=ON L35 AND (FEED? OR DIET? OR FOOD?)

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L39	2	SEA ABB=ON	PLU=ON	L38 AND (WATER? SEA? OR RIVER? OR LAKE? OR OCEAN? OR MARINE? OR AQUATIC?)
		E FEED/CT		
L40	104865	SEA ABB=ON	PLU=ON	FEED+PFT,NT/CT
L41	5	SEA ABB=ON	PLU=ON	L35 AND L40
L42	4	SEA ABB=ON	PLU=ON	L33 AND ANIMAL FEED?
L43	58	SEA ABB=ON	PLU=ON	L27 OR L34 OR L36 OR L37 OR L39 OR L41 OR L42
L44	36	SEA ABB=ON	PLU=ON	L43 AND (1840-2002)/PRY,AY,PY